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MOTHER AND INFANT CARE, PRACTICAL NURSE TRAINING PROGRAM, LESSON PLANS, PREPARED BY PRACTICAL NURSING INSTRUCTORS DURING CONFERENCE (UNIVERSITY OF TENNESSEE, AUGUST 14-18, 1961).

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PRACTICAL NURSE INSTRUCTORS, IN CONFERENCE, COMPILED THIS INDIVIDUALLY PLANNED AND TESTED MATERIAL TO BE USED IN PRACTICAL NURSE EDUCATION. THIRTY-TWO LESSON PLANS ON THE SUBJECT OF MOTHER AND INFANT CARE COVER TOPICS RANGING FROM THE REPRODUCTIVE SYSTEM TO COMPLICATIONS INVOLVING THE NEWBORN. EACH PLAN INCLUDES AIM, REFERENCES, MATERIALS, INSTRUCTIONAL AIDS, AND EVALUATION SUGGESTIONS. BECAUSE THESE PLANS ARE TO SERVE ONLY AS GUIDES FOR INSTRUCTORS IN THE PREPARATION OF DAILY PLANS, THERE IS NO SPECIFIC TIME ALLOTMENT FOR THE COURSE. THE TEACHER SHOULD BE A REGISTERED NURSE WHO IS CERTIFIED TO TEACH. THE STUDENT SHOULD BE A HIGH SCHOOL GRADUATE OR THE EQUIVALENT. A TALK, "CHILDBIRTH AND CIVILIZATION," BY DR. SAM C. COWAN, SR., NASHVILLE OBSTETRICIAN, IS INCLUDED. TEN OR FEWER COPIES ARE AVAILABLE FOR $3.00 FROM VOCATIONAL CURRICULUM LABORATORY, BOX 1114, MURFREESBORO, TENNESSEE 37130. (MS)

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Lesson Plans
For
Mother and Infant Care

PRACTICAL NURSE TRAINING PROGRAM

Prepared by
INSTRUCTORS DURING CONFERENCE
August 14-18, 1961
Reprinted 1967

TENNESSEE STATE BOARD FOR VOCATIONAL EDUCATION
J. H. WARF, EXECUTIVE OFFICER
TRADE AND INDUSTRIAL EDUCATION
NASHVILLE
1967
In Cooperation With The
DEPARTMENT OF INDUSTRIAL EDUCATION-COLLEGE OF EDUCATION
THE UNIVERSITY OF TENNESSEE

VT 02935

LESSON PLANS

MOTHER AND INFANT CARE

PRACTICAL NURSE TRAINING PROGRAM

Prepared by

Practical Nursing Instructors

During

CONFERENCE

August 14-18, 1961

Held at

The University Student Center

University of Tennessee

KNOXVILLE

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U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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PREFACE

A conference for all Trade and Industrial Education personnel was held in Knoxville, Tennessee, August 14 through 18, 1961. During the Practical Nursing Sectional Meetings lesson plans for Mother and Infant Care were developed. It is essential that each instructor prepare course outlines and lesson plans. These prepared plans should serve as a guide for instructors, thereby providing assistance in the structure of daily lesson plans.

A tape recording of "Childbirth and Civilization" by Dr. Sam C. Cowan, Sr., was presented to the group. This has been reproduced by permission and is a part of this report. Dr. Cowan is a prominent Nashville obstetrician and for many years on the faculty and staff of the Vanderbilt University School of Medicine, Nashville, Tennessee. We are most grateful for this presentation and those of us who know him personally were particularly grateful for the opportunity to hear Dr. Cowan.

The name of the instructor preparing the lesson plan is on each plan. No time allotment is given, therefore the instructor may add or remove material to cover the points in her own plans and so determine the amount of time to be spent on each lesson.

The following coordinators contributed to the conference by acting as discussion leaders:

Mrs. Mary Rose Williams, R. N., Chattanooga
Mrs. Viola Turner, R. N., Memphis
Miss Martha Ray, R. N., Nashville

Eloise Matthews, State Supervisor Practical Nurse Training	H. C. Colvett, State Coordinator Division of Vocational Education

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Childbirth and Civilization . . . . Sam C. Cowan, Sr., M.D.

INSTRUCTOR'S LESSON PLAN

Lesson 1 of 32
Key

NAME OF LESSON:	The Social Significance of Childbirth
AIM OF LESSON:	To help students understand the importance of childbirth in our society
REFERENCES:	Obstetrics, chpt. 2, Bookmiller Simplified Nursing, pp. 287-288, Thompson Sociology and Social Problems, Jensen
MATERIALS:	Information Sheet No. 1 Social Significance of Childbirth
INSTRUCTIONAL AIDS:	Maternal and Infant Mortality Statistics Charts Chalkboard

STEP I. INTRODUCTION:

Today we are beginning our series of lessons on the needs of mothers and infants. This subject is of vital concern to everyone since it deals with human reproduction. The knowledge which you will gain here will be useful in your own family life, and it will expand your scope of service to another group of patients.

As we approach the study of mothers and babies we need to place proper emphasis on the social and economic aspects of childbirth. Although births occur continually and we become accustomed to hearing about them, the birth of a child is the beginning of a new citizen of our nation. A democracy such as ours depends for its continued success upon replacement of citizens by equal or superior quality. It is for this reason that our nation has put forth a strong effort within the past thirty years to make childbirth safer.

Now let us look at the history of maternity care and put some mortality figures on the board to illustrate how the death rates of both mothers and infants have been lowered by better care.

STEP II. PRESENTATION:

Points of Information	Key Points
A. History of maternity care 1. Formerly all given at home 2. Only women permitted to births until middle ages 3. Aseptic technic brought great change.	Put statistics on board Maternal deaths per 100 live births 1. 1925 - 6 2. 1930 - 8 3. 1949 - less than 1
B. The three major causes of maternal deaths 1. Infection 2. Hemorrhage 3. Toxemia	Show Charts Maternal mortality Main Causes Why Do These Mothers Die?
C. Main causes of infant deaths 1. Asphyxia 2. Immaturity 3. Birth injuries 4. Other conditions of early infancy 5. Congenital malformations 6. Influenza and pneumonia 7. Accidents 8. All other causes	Show Charts Infant Mortality Main Causes Where are Babies Born? As Income Drops Deaths of babies rise
D. Maternity care greatly improved since 1900 1. Public Health services increased	Distribute Information Sheet No. 1 and discuss. Public Health nurses hold clinics in rural areas and teach families in homes.
2. More hospital service available	How many of you were born in a hospital?
3. Better hospital service	Hospitals must meet Public Health standards for maternity care
4. Physicians and nurses are better trained	

5. Less untrained mid-wives	Mid-wives supervised by Public Health
6. Clinics-Prenatal, Post-natal, Well-Baby and Planned Parenthood	Tell what these clinics do.
7. Early treatment of syphilis, toxemia, etc.	
8. Blood banks, antibiotics and sulfa drugs	
9. Aid to Dependent Children grants	

STEP III. APPLICATION:

A. Why is our federal government interested in the welfare of mothers and infants?

B. What is being done by the federal government for mothers and infants?

C. What local facilities are available for free maternal and infant care?

D. What changes have occurred in maternal and infant mortality in the past 30 years, and what caused these changes?

E. How do you feel about having your tax dollar used for maternal and child health?

STEP IV. TEST:

T (F) 1. Any mother or child regardless of income, is eligible for free care under Social Security funds.

T (F) 2. Free care is only available to maternity patients who are totally unable to pay.

(T) F 3. The supervision of mid-wives is a function of the local health agency.

T (F) 4. The distribution of printed matter concerned with the health of mothers and children is the responsibility of the State Health Departments.

(T) F. 5. The planned Parenthood Association is a private agency.

Completion

The three main causes of maternal deaths are ________________, ________________ and ________________.

Essay

Are you in favor of aid to dependent children for the children of unmarried mothers? Write a paragraph to support your answer.

SUMMARY:

1. From our lesson today we have seen how maternity care has developed from crude and primitive methods to a branch of preventive medicine requiring the services of specially trained doctors and nurses, hospitals, clinics, Public Health agencies and private organizations.

2. We have learned that all of these measures spell safer motherhood for our population.

3. We also have learned the importance which has been placed on maternity care by our Federal, State, and Local governments through the use of public funds to extend and improve maternal and infant care.

4. Tomorrow we will begin our study of the actual process of reproduction and will introduce this study through a review of the anatomy and physiology of the female pelvis.

This lesson plan was prepared by:
Mrs. Nell Adams, Instructor, Johnson City, Tennessee

INSTRUCTOR'S LESSON PLAN

Lesson 2 of 32
Key

NAME OF LESSON: Review of the Reproductive System
A. The Pelvis
B. Female Organs

AIM OF LESSON: To develop understanding of the function of female reproductive organs.

REFERENCES: Practical Nursing by Rapier, Koch, Moran, Fleming, Cady, Jensen - First Edition - C. V. Mosby Co.
Structure and Function of the Body by Catherine Parker Anthony - C. V. Mosby Co.
Mosby Review of Practical Nursing, Second-Third Edition

EQUIPMENT: Female Manikin

MATERIALS: Pass out sheets. Female Pelvis and Reproductive Organs

INSTRUCTIONAL AIDS: Charts and Posters of Female Pelvis, Reproductive Systems, Chalkboard drawings

STEP I. INTRODUCTION:

In the study of Body Structure and Function it was learned that the pelvis carries the weight of the body and distributes it to the lower limbs. It was also learned that the flat bones of the pelvis protect the generative organs. Now, in the study of Maternal and Infant Care we will study the pelvis as a bony canal through which the baby passes during delivery. In early pregnancy the obstetrician measures the pelvis to determine if normal delivery is possible. A system of pelvic measurements (pelvimetry) gives the obstetrician a fair idea of the size and shape of each individual patients' pelvis. This data with other observations (size of baby's head) provides the doctor with the needed information pertaining to the ease or difficulty with which the approaching delivery may be accomplished.

STEP II. PRESENTATION

Points of Information	Key Points
A. Bones of the pelvis 1. Innominate a. Ilium b. Ischium c. Pubis 2. Sacrum 3. Coccyx United to form pelvis by sacrum and coccyx.	Use large "pull-down", or roller, chart of pelvis
B. Parts of pelvis 1. False pelvis 2. True pelvis	Point our ileopectinial line on chart. Discuss engagement briefly
C. The inlet or brim 1. Heart-shaped 2. Deeper behind than in front 3. Curved angle determines direction of body	Use Birth Atlas to show relationship of baby's head to pelvis
D. The outlet 1. Very irregular 2. Longer front to back	
E. Comparison of Male and Female pelvis 1. Pubic arch broader in female 2. Male pelvis is deep, cone shaped and rough 3. Larger muscles in male	For comparison use pages 82 and 83 in textbook - Practical Nursing by Rapier, Koch, Moran, Fleming, Cady, Jensen. Discuss differences
F. Pelvic measurements 1. Importance a. Each patient must be measured b. Any irregularity or abnormalty in size or shape may necessitate a tedious or instrumental delivery or need for caesarean section	Discuss causes of variations. Use charts or chalkboard drawings to show various measurements

2. Types of Measurements
    a. External-gives some indication of internal measurements.
        (1) Iliac crests
        (2) Iliac spines
        (3) External conjugate

    b. Internal measurements
        (1) Diagonal conjugate
        (2) True conjugate
        (3) Ischial spines
        (4) Pubic arch

Explain briefly what happens when the inlet is too small.

Explain what happens when outlet is too small

STEP III. APPLICATION:

A. Why is it important to study the size and shape of the female pelvis?
B. Does the pelvis have movable joints?
C. What diseases or injuries may cause an abnormal pelvis?
D. How do the male and female pelvis compare in size and shape?

STEP IV. TEST:

1. Which is more important to delivery, the false pelvis or the true pelvis?
2. Name the bones of the pelvis.
3. What type of delivery is planned if the pelvis is too small for delivery?

SUMMARY:

1. The female pelvis is normally constructed to allow for passage of the fetus. It is important to know if the pelvis is too small or if there is any deformity. The pelvis measurements are made in early pregnancy. It does not expand at delivery.

2. Caesarean Section is planned if the pelvis is too small for delivery.

3. The true pelvis is more important than the false pelvis.

4. Infections that attack the bones (or bone marrow) or accidents may cause an abnormal pelvis.

5. The male pelvis is deep, cone-shaped and rough. The female pelvis is bowl shaped and the pubic arch is broader than in the male.

This lesson was prepared by:
Aileen Burkett, R. N., Knoxville, Tennessee [redacted]

INSTRUCTOR'S LESSON PLAN

Lesson 3 of 32
Key

NAME OF LESSON: Conception. Signs and symptoms of pregnancy

AIM OF LESSON: To help understand process of how life is started and the signs and symptoms of pregnancy, presumptive, probable, and positive.

REFERENCES: Zabriskie's Handbook of Obstetrics, Rapier, et al Practical Nursing, and Bookmiller Bowen Textbook of Obstetrics and Obstetrical Nursing

MATERIALS: Test - one copy per each class member

INSTRUCTIONAL AIDS: Birth Atlas, charts, model of pelvis by Ortho Pharmaceuticals, Chalkboard

STEP I. INTRODUCTION:

We have learned and reviewed both the male and the female reproductive systems and are ready to learn the part these systems play in the continuation of the human race. First we will discuss how, where and when conception occurs, then study the signs and symptoms of pregnancy, the presumptive, probable and positive ones. The symptoms are referred to as those changes which are noticed by the prospective mother and the signs are those which the doctor may be able to bring out.

STEP II: PRESENTATION:

Points of Information	Key Points
A. Definition of Conception	Fusion of an ovum and spermatozoa
B. How this occurs	1. Semen deposited in the vagina at or near cervix uteri through the sexual embrace given anyone of several names; sexual intercourse, copulation, coitus 2. 3 to 5 hundred million spermatozoa in each ejaculation of spermatic fluid

	3. Sperm enter uterus and swim upward and outward through the fallopian tubes. Takes 65 to 75 minutes a. Human egg lives about 24 hours and sperm functions 24 to 48 hours.
C. Where conception occurs	1. Believed the union of sperm and ovum takes place in distal end of fallopian tube and requires only one sperm. 2. After union, current carries downward into uterus where it attaches itself to uterine wall. Takes from 7 to 9 days.
D. When conception occurs	Necessary to have both germ cells for fertilization which takes place halfway between menstrual periods when ovary has discharged an ovum or during the "ovulation period"

(We will cover fetal development within the next few days but now let us discuss signs and symptoms of pregnancy taking up presumptive signs and symptoms first.)

E. Presumptive Signs	
1. Cessation of mensus	1. May cease from many causes a. Thyroid imbalance b. Debilitating illnesses c. Psychic factors d. Severe anemia 2. May be delayed for some reasons a. Fear of, or great desire for pregnancy b. Change in climate
2. Morning sickness	1. Usually appears 2 weeks after a missed period and ceases 6 weeks later 2. Nausea without vomiting occurs other times during day

3. Frequency of Urination	1. Enlarging uterus presses on bladder 2. When rises out of pelvis condition disappears until about last month due to head down in pelvis
4. Breast Changes	1. Due to hormones of pregnancy 2. Occur with uterine and ovarian disorders
5. Quickening	1. Feeling of fetal movements 2. Occurs about 20th week of gestation 3. Gas pains sometimes mistaken for fetal movements
F. Probable Signs	
1. Abdominal Changes	1. Becomes larger and distended 2. Striae may be present 3. Presence of linea nigra
2. Uterine Changes	1. After 6 to 8 weeks signs of softening of isthmus of uterus 2. Braxton-Hicks' sign may be present
3. Cervical Changes	1. After 8 weeks becomes softer 2. Bluish discoloration (Chadwick's sign)
4. Chemical Tests	1. A-Z Test, Friedman's Test, etc.
G. Positive Signs	
1. Fetal Heart	Present 20 to 22 weeks
2. Active and Passive Movements of Fetus	1. Experienced hand on abdominal wall 2. Ballottement-by vaginal examination usually
3. X-ray	At 18 to 20 weeks gestation bones outlined.
4. Palpation of Fetus	Head hard movable mass

STEP III. APPLICATION:

A. What two cells are necessary to start a new life?
B. Where does fertilization usually take place
C. What period of the menstrual cycle is fertilization most likely to occur?
D. What are three presumptive signs of pregnancy?
E. What is the procedure for obtaining a urine specimen to be used for an A-Z test?
F. Give a positive sign of pregnancy.

STEP IV. TEST

1. The human egg probably lives 24 hours. Which of the following is the correct length of time the sperm is able to function?
   1. 12-16 hours
   2, 16-24 hours
   3. 24-48 hours
   4. 48-72 hours

2. Ovulation occurs most frequently
   1. Halfway between menstrual periods
   2. Anytime during a menstrual cycle
   3. Three days before menstruation starts

3. The following are presumptive signs of pregnancy with one exception. Mark the exception.
   1. Cessation of menses
   2. Frequency of urination
   3. Cervical changes
   4. Breast changes

4. Irregular painless uterine contractions are known as:
   1. Chadwick's sign
   2. Hegar's sign
   3. Braxton-Hick's sign

5. Fetal heart sounds are audible about 20th to 22nd week of gestation. The rate usually varies between
   1. 100-120 per minute
   2. 120-160 per minute
   3. 160-200 per minute

6. Fetal bones may be outlined by x-ray at
   1. 8-16 weeks gestation
   2. 20-22 weeks gestation
   3. 18-20 weeks gestation
   4. 6 weeks gestation

SUMMARY:

Conception is union of an ovum and sperm which usually occurs during the "ovulation period." Several signs and symptoms occur following fertilization but few are positive signs of pregnancy, however a physician puts all signs and symptoms together and usually makes a correct diagnosis after a period of 6 to 8 weeks have elapsed since the last menstrual period.

This lesson was prepared by:
Mrs. Robert W. Carter, Instructor, Shelbyville, Tennessee

INSTRUCTOR'S LESSON PLAN

Lesson 4 of 32
Key

NAME OF LESSON: Physiological and Emotional Changes

AIM OF LESSON: To acquire a knowledge and understanding of the physical and emotional changes that take place in the pregnant woman.

REFERENCES:
Zabriskie and Eastman's Handbook of Obstetrics, Chapter 6
Beck and Rosenthal, Obstetrical Practice, 7th Edition - Williams and Wilkins Baltimore, Md.
Esau et al. Practical Nursing Today, pp. 105-116 Putnam Sons, New York
Thompson and LeBaron, Simplified Nursing, pp. 293-296

INSTRUCTIONAL AIDS:
Birth Atlas
Pictures from Zabriskie's Handbook of Obstetrics

STEP I. INTRODUCTION:

We are now going to study the physical and emotional changes taking place in the expectant mother in order to understand and help her. Despite various symptoms of pregnancy which may prove troublesome, there is no reason why the expectant mother should not feel well throughout her entire pregnancy. Knowing what to expect should contribute to her state of well being.

STEP II. PRESENTATION:

Points of Information	Key Points
A. Physical changes 1. The uterus	1. Changes shape, size and consistency-increases in size from 50 to 1000 grams. 2. Lining undergoes changes. 3. Peritoneal covering enlarges. 4. Muscles increase enormously and become stronger.

	5. Blood vessels penetrate through uterine muscle, increase in size and number. 6. Rises from pelvis at 3 to 4 months a. Level with navel at 6 months. b. Descends to pelvis about 2 weeks before labor (lightening)
2. Cervix	1. Becomes softer and spongier 2. Bluish color due to increased blood supply 3. Cervical glands become tremendously distended with mucous a. Form a "mucous plug" the show b. Seal the uterus off from contamination
3. The vaginal canal	1. Enlongation caused by rising of uterus in pelvis 2. Mucosa thickens 3. Secretion increased 4. Increased vascularity, and more elastic
4. Abdominal changes	1. Striae caused by rapid stretching of the tissues 2. Separation of rectus muscles due to rapid distention 3. Umbilicus protrudes during last weeks
5. The breasts	1. Enlarged and painful 2. Skin thin and sensitive 3. Nipples erectile and enlarged, darker, secondary areola 4. Escape of colostrum 5. Primary and secondary areola 6. Tingling sensation

6. Tubes and ovaries	1. Tubes lengthen and act as ropes to hold uterus in place 2. Ovary which ovulated becomes larger 3. Ovaries inactive during pregnancy
7. Endocrine glands	1. Thyroid increases in size and activity 2. Parathyroids enlarge, secretion increases 3. Pituitary increases its activity a. One hormone contracts blood vessels b. One contracts uterus c. Some effect follicles and corpus luteum 4. Placenta gives forth hormones that effect ovaries and corpus luteum
8. Heart and Circulatory System	1. Heart enlarges some 2. Output increases 1/3 to 1/2 during latter part 3. Blood volume increases (more water, cells are same) 4. Anemia results from storage of iron by fetus 5. Blood pressure varies only in toxemia 6. Varicosities form from venous congestion in legs
9. Skeletal System	1. Pelvic joints soften 2. Pelvic joints more movable 3. Bones and teeth affected
10. Respiratory System	1. Lungs impeded in late pregnancy due to pressure of fetus against diaphragm 2. Breathing deeper and more frequent
11. Digestive System	1. Slowing of peristalsis causes nausea and vomiting

	2. Loss of weight in early pregnancy with slight anemia 3. Basal metabolism raised in later pregnancy 4. Liver is enlarged and displaced in later pregnancy and unable to keep its supply of glycogen
12. The Urinary tract	1. Work of kidneys increased but no change in kidneys themselves 2. Amount of urine increases and urine has low specific gravity 3. Sugar in urine due to reabsorbing colostrum 4. Frequency is common in first and last weeks due to pressure 5. Bladder later pressed upon by presenting part 6. Presence of albumen abnormal 7. Ureters may be dilated from stagnation (pyelitis common complication)
13. Skin	1. Sweat and sebaceous glands very active 2. Deposit of brown pigment (mask of pregnancy) 3. Formation of striae 4. Linea nigra
14. Weight	1. Normal gain is 1/2 pound a week or not more than 20 pounds 2. Products of conception weight about 13 pounds 3. Slightly less first trimester 4. Gain of 1 pound a week during 8th and 9th month is normal
15. Posture	1. Changes as enlargement of abdomen advances 2. Sacroiliac joints and symphysis pubis more movable

	3. Painful locomotion and backache 4. Waddling gait
B. Emotional Changes	
1. Temporary experience	1. Requires sympathy, understanding and guidance 2. May be beset by fearful anticipations of pain, hospitalization, anesthetics, and revolutionary physical change at end of pregnancy
2. May develop morbid fears of death	
3. May have many fears about her child, based on "old wives tales"	1. Fear of losing child 2. Fear of mental or physical abnormalities 3. Fear of being inadequate to care for child
4. Superstitious fears	1. Food fads 2. Danger of marking
5. Reassurance	1. Childbirth is natural process 2. Modern methods and use of anesthesia reduce pain of childbirth materially
6. Departure from healthy conditions are not uncommon	1. Same results of emotional instability a. May be anxious and unhappy b. May become irritable, excitable, apprehensive and unreasonable c. Real psychosis may develop d. Depression and even mania may result

STEP III. APPLICATION:

A. In one column let us list again the organs in the female reproductive system. In another column list the pertinent changes that take place in each during pregnancy.

B. What are some of the "old wives tales" that you have heard?

C. How can each one be disproved by scientific information?

STEP IV. TEST:

1. What do you understand by:
   a. The show
   b. Striae gravidarum

2. What is the significance of glycosuria in pregnancy?

3. How can a nurse help a woman in late pregnancy who is distressed by various fears?

This lesson plan was prepared by:
Mrs. Pauline Crick, Instructor, Manchester, Tennessee

INSTRUCTOR'S LESSON PLAN — Lesson 5 of 32
Key

NAME OF LESSON: Fetal Development

AIM OF LESSON: To acquaint ourselves with the development of the product of conception from the embryonic state through the 40th week of development.

REFERENCES:
Family-Centered Maternity Nursing, Wiedenback, Ernestine
Simplified Nursing, Thompson and LaBaron
Obstetrics, Greenhill

MATERIALS: One test for each student

INSTRUCTIONAL AIDS:
Chalkboard
Pictures from text showing stages of fetal development
Opaque Projector
Charts - #1 Fetal Circulation (May be obtained from Ross Lab. without cost)
#2 Placental Development and Circulation (Also, available from Ross Laboratories)
#3 Menstrual Physiology (Kimberly-Clark Corporation)

STEP I. INTRODUCTION:

In all nature's wide universe of miracles there is no process more wonderous, no mechanism more incredibly fantastic, than the one by which a tiny speck of tissue, the human egg, develops into a 7 pound baby. So miraculous did primitive people consider this phenomenon that they frequently ascribed it all to superhuman intervention and overlooked the fact that sexual intercourse played a part in it. Today, of course, we recognize that the union of a female germ cell (ova) with a male germ cell (spermatazoon) constitutes the beginning of a new human being. We have learned how the uterus prepares for the fertilized ovum each month and how menstruation results when conception has not taken place. In our lesson today we will review the physiology of menstration briefly and then trace the development of the fetus from conception to full term.

STEP II. PRESENTATION:

Points of Information	Key Points
A. Physiology of ovulation and menstruation 1. Thickening of endometrium 2. Ovulation 3. Menstruation	Use wall chart #3 to show changes that occur
B. Cell union and cell division 1. Morula stage moves down tube and buries itself in endometrium 2. Now called decidua 7 to 9 days	Use projector to show picture from obstetrics textbook of fertilization and cell division
C. Development of the Embryo 1. Sends out root like projections, chorionic villi into decidua to get nourishment; these and decidua cells from placenta 2. Basic cell layers at about 16 days a. Ectoderm: Skin, hair, nails, skin glands, nervous system, ears, eyes b. Mesoderm: All types of muscle, connective tissue, bone marrow, blood, lymphoid, blood vessels c. Entoderm: Epithelium of the respiratory tract except nose, digestive tract, bladder and urethra	Show pictures of early stages of fetal development using projector. Also sometimes it is possible to get aborted embryo from pathology lab at hospital
D. Fetus 1. Explain lunar months 2. After 2 months called fetus	Show pictures of later development

E. Placenta 1. Formed on upper anterior or posterior wall 2. Mass of capillaries and large vessels to exchange nutrients and wastes	Use wall chart #2 showing section of placenta and umbilical cord
F. Cord 1. Covered by the two membranes 2. Padded with Wharton's jelly 3. Contains two arteries and 1 vein	Same chart as #5
G. Fetal Circulation	Show drawing of fetal circulation from chart #1

STEP III. APPLICATION OR TEST:

A. Explain the difference between the ovum, the embryo, and the fetus
B. What is a lunar month?
C. What is meant by viability?
D. What is the morula?
E. Define endometrium
F. Which parts of the body are framed from the ectoderm? From the mesoderm?
G. Describe the fetus at term
H. Explain the function of the placenta
I. Define ductus arteriosus, and foramen ovale
J. In what way may sufficient knowledge of fetal development be useful to the nurse in prenatal care?
K. Define lanugo, meconium, and vernix caseosa

SUMMARY:

New life begins when ovum and sperm unite. Genes transfer total heredity of new life. Embryo receives nourishment and eliminates waste through placenta. Quickening at 4 1/2 to 5 months, fetal heart tones heard. Vialable at 7 months. Full term at 40 weeks or 280 days.

This lesson was prepared by:
Mrs. Margaret Davis, Instructor, Nashville, Tennessee

NAME OF LESSON:	Prenatal Care
AIM OF LESSON:	To develop a knowledge and understanding of the normal development, adequate growth, and good health of the baby and of the methods to insure optimum health of the mother
REFERENCES:	Prenatal Care, U. S. Department of Health, Education and Welfare Zabriskies Obstetrics for Nurses, Fitzpatrick and Eastman
INSTRUCTIONAL AIDS:	Poster #1 - Represent Medical care with pictures of history sheet, stethoscope, otoscope, percussion hammer, tongue depressor, urine specimen bottle, scales, needle and syringe, sphigmomanometer. Poster #2 - Represent Medical Social Service with pictures of children in nursery or playground, lady taking care of school age children who are kept at home, lady taking care of mother and baby, picture of someone talking with young girl to illustrate problems of illegitimacy. Poster #3 - Represent Nutrition in Pregnancy with pictures of Basic 7 Food Groups and graphic type chart of Daily Food Needs of Women. Poster #4 - Represent General Hygiene with pictures of women sleeping, sitting to work, walking outdoors, washing face, taking tub bath and shower, brushing teeth, and pictures of different types of maternity clothes, lingerie, abdominal supports, flat-heeled shoes and not-too-high-heeled shoes. Poster #5 - Represent Preparation For Parenthood with pictures of mother, father, infant and other children in the family. Poster #6 - Represent Preparations for Baby with pictures of layette and nursery equipment.

STEP I. INTRODUCTION:

Prenatal, or antepartal, care is an absolute necessity if a substantial number of pregnant women are to avoid disaster; and it is helpful to all.

STEP II. PRESENTATION

Points of Information	Key Points
A. Definition and importance	The medical supervision and care given to pregnant women during the period between conception and the onset of labor; Mother's health, happiness, knowledge; baby's normal development, growth and health
B. Medical Care	Poster #1 - Medical examination
C. Nursing Care	Discuss role of nurse in clinic - evaluate and help meet needs of patient, health teaching, assist doctor, recognize health problems. Public Health Nurse - case finding, intermediary between patient and doctor, visitations, health teaching to patient and family, health problems.
D. Medical Social Service	Poster #2 - discuss functions of Social Service Worker - visit homes, interview patient and family, ascertain physical and emotional needs of family, problem of illegitimacy.
E. Nutrition in Pregnancy	Poster #3 and chart of Daily Food Needs of Women. Discuss Basic 7 and Food Needs. Weight control - desired weight gain 20-25 lbs. because excess weight puts strain on muscles and causes fatigue, more serious complications, likely to be retained after delivery. Discuss caloric value of foods, preparation, substitutes, salt reduction, average servings.

F. General Hygiene	Poster #4 - Discuss rest, sleep, relaxation, exercise, care of skin, clothing, care of teeth, bowel habits, douches, marital relations, smoking.
G. Preparation for Parenhood	Poster #5 - emphasize concept of family centered care - joint responsibility of father and mother - foundation of more enriched family life.
H. Preparations for Baby	Poster #6 - Discuss layette and nursery cost - within financial limits of family. Ready-made or home-made clothing; comfortable, easy to launder, easy to put on light weight, soft material.

STEP III. APPLICATION

Discussion Questions:

A. Why is prenatal care important?
B. What is the role of the nurse in prenatal care?
C. How does nutritional requirements of pregnant women compare with those of non-pregnant women?
D. What are some important aspects of general hygiene in pregnancy?
E. What is meant by the "concept of family-centered care?"
F. What are some factors to be considered in planning the baby's layette and nursery?

STEP IV. TEST:

Encircle the correct answer

Situation: Mrs. Ann Brown, age 21, had last menstruated six weeks before seeing her doctor. He told her that she was pregnant and referred her to an obstetrician.

1. Her prenatal examination included
   A. Routine physical examination
   B. Urinalysis

1. all except c
2. all except d

C. Medical history
D. Vaginal examination
E. Blood test

(3.) all
4. all except e

2. The obstetric examination consists of
A. Temperature, pulse, respiration
B. Palpation of the abdomen
C. Auscultation of the abdomen
D. Estimation of pelvic measurements
E. Vaginal examination

1. a, c, e
(2.) all except a
3. a, b, d
4. e only

3. Mrs. Brown's blood was tested for
A. Syphilis
B. Prothrombin time
C. Estimation of hemoglobin
D. RH factor
E. Blood type

1. a, b, c
2. b, d, e
3. all except a
(4.) all except b

4. While Mrs. Brown was waiting to see the doctor, the nurse gave her help and guidance by
A. Discussing symptoms of pregnancy
B. Emphasizing importance of weight control
C. Giving her instructive reading material
D. Taking the T. P. R.
E. Explaining that she should take shower baths only

1. a, c, e
2. b, d, e
3. c, d
(4.) a, b, c

5. The doctor instructed Mrs. Brown to eat a well-balanced, nourishing diet. This would include
A. Generous allowance of yellow, green leafy vegetables
B. 1 pint of milk daily
C. Meat, eggs and fish
D. Desserts as desired
E. Citrus fruits

(1.) a, c, e
2. b, d
3. b, c, d
4. a, b, c, e

6. Later in her pregnancy Mrs. Brown will need additional nutrients which include
A. Protein 78 Gm.
B. Calcium 5 Gm.
C. Vitamin A 5000 IU.
D. Vitamin D 400 IU.
E. Calories 2600

1. all except e
2. a, c, e
(3.) a, d, e
4. all

7. To emphasize the importance of weight control to Mrs. Brown, the doctor explained that she should not gain more than 20-25 pounds because increases over this amount

A. Cause strain on leg and back muscles
B. Predispose to complications
C. Cause fatigue
D. Are likely to result in an abnormal baby
E. Will probably be retained after delivery

1. a, b, d
(2.) all except d
3. a, d, e
4. c, d, e

8. Some good exercises for Mrs. Brown include

A. Walking in the fresh air
B. Housework
C. Swimming
D. Tennis
E. Horseback riding

1. a, c, d, e
2. a, b, d
3. all except e
(4.) a, b

9. Regarding rest, relaxation and sleep, the nurse should tell Mrs. Brown that

A. Pregnant women become tired more readily
B. She should get as much sleep as she feels she needs
C. Rest means to relax
D. She should sit instead of stand when possible, even while doing housework
E. Some of the minor discomforts of pregnancy can be overcome by rest

1. all except e
2. all except b
3. a only
(4.) all

10. Mr. and Mrs. Brown went shopping for the baby. They selected suitable supplies such as

A. 8 dozen cotton diapers, 27 inches square
B. 2 nightgowns with drawstrings at the neck and bottom
C. 4 cotton receiving blankets, 40 inches square
D. 2 slipover sweaters
E. 4 cotton shirts
F. 6 diaper pads made of cotton toweling

(1.) c, e, f
2. b, c, d
3. a, d, f
4. all

SUMMARY:

Through the combined efforts of the expectant parents, the obstetrician, the nurse and other members of the health team, good prenatal care will result in maximum physical and mental fitness of the mother and a solid foundation for normal growth and development of the baby.

This lesson plan prepared by:
Mrs. Nancy Farmer, Instructor, Murfreesboro, Tennessee

INSTRUCTOR'S LESSON PLAN

Lesson 7 of 32
Key

NAME OF LESSON: Minor Complications of Pregnancy

AIM OF LESSON: To acquaint the students with the minor discomforts of pregnancy

REFERENCES:
Basic Nursing, Gill
Simplified Nursing, 7th Ed. Dakin, Thompson and LeBaron
Zabriskie Obstetrics for Nurses, Eastman and Fitzpatrick, 10th Ed.

MATERIALS: 1 copy per each student

INSTRUCTIONAL AIDS: Blackboard, Chalk

STEP I. INTRODUCTION

Often we hear among the conversations of the young mother or you may have thought it yourselves that it is the nine months of discomfort in carrying the baby that seems to distract from the mother's feeling of well being. Yet we will learn that with a little knowledge of what is to be expected and some common sense most of those so called discomforts can be prevented.

STEP II. PRESENTATION

Points of Information	Key Points
A. Minor Complications	1. Common complaints experienced by most expectant mothers in the course of a normal pregnancy. 2. Not serious in themselves. Can be avoided in many instances by preventive measures or common sense.
B. Frequent Urination	1. Occurs early in pregnancy. 2. Caused by pressure on the bladder of the growing uterus.

C. Nausea and Vomiting

1. So called "Morning Sickness"
2. Thought to be an emotional problem, but may be due to physiological changes of normal gestation.
3. Symptoms usually appear about the end of 4th to 6th and last until about the 12th week.
4. Nausea occurs in about 50% pregnancies. About 1/3 experience some vomiting usually in the morning.
5. May be controlled by eating dry carbohydrates before arising. Avoid greasy foods, and eat small meals several times daily.
6. It is desirable to prevent the first attack so it will not become established because it may develop into a serious complication.

D. Heartburn

1. May occur anytime throughout pregnancy. Reverse peristaltic moves caused by diminished gastric mobility causes regurgitation of stomach contents into esophagus. This irrigation of the esophageal mucosa causes the heartburn. It has nothing to do with the heart and is often associated with other gastrointestional symptoms.
2. Nervous tension, worry, and fatigue contribute to its intensity. Fatty foods should be avoided.
3. Soda bicarb should be avoided because of sodium. Ask doctor for prescription.

E. Flatulence	1. Very common and disagreeable. 2. Regular daily elimination and avoiding of gas forming foods of prime importance.
F. Constipation	1. Due to impaired peristaltic motion of the intestine because of the growing uterus. 2. Stress importance of good hygiene adequate fluid intake and proper diet. 3. Enemas and cathartics used only if prescribed by doctor.
G. Diarrhea	Not too common but should be reported at once. If prolonged may cause abortion or in latter months premature labor.
H. Backache	1. So called "Military Gait". 2. Caused by changes in posture to compensate for the weight of uterus. Shoulders thrown back in order to maintain body balance and the inward curve of spine is exaggerated. The relaxation of the sacro-iliac joints also causes varying degrees of backache. 3. The importance of good posture should be stressed in early pregnancy. Good shoes and supporting girdle sometimes helps.
I. Dyspnea	1. Difficult breathing or shortness of breath results from pressure on diaphragm by the enlarged uterus. 2. Usually not serious and is relieved after lightening and disappears after delivery.

3. Patients more comfortable sitting up supported with pillows.
4. Always reported in patients with known heart disease because it may be a symptom of heart failure.

J. Varicose Veins

1. Varicosities are enlarged veins
2. Occur usually in lower extremities and sometimes extend into genitals.
3. Caused by pressure in the pelvis due to enlarge uterus which presses on the abdominal veins.
4. Symptoms:
   a. dull aching pain in legs
   b. the appearance of bluish tangle of veins up and down legs.
5. Treatment-Prevention
   a. remove pressure of clothing eg. garters
   b. rest in right angle position 2-5 minutes several times daily
   c. elastic stockings, ace bandage

K. Hemorrhoids

1. Define--varcosities of veins of lower end of rectum may protrude through anus.
2. Due to pressure and aggravated by constipation.

3. Treatment
    - a. relieve constipation
    - b. when protruding gently pushed back lubricating finger with mineral oil using knee chest position
    - c. ice bag or cold witch hazel compresses give relief
    - d. suppositories

L. Cramps

1. Definition-painful spasmotic muscular contractions in legs usually occurring in last months.
2. Causes-fatigue, chilling, insufficient calcium in diet
3. Treatment-applying pressure on knee and forcing toes upward. Gently rubbing affected part. Teach husband how.

M. Edema

1. Definition-swelling of lower extremities especially in hot weather.
2. Relieve by rest and elevating feet.
3. Should be watched and reported because it is a symptom of toxemia

N. Vaginal Discharge

1. Moderate increase is normal but profuse drainage should be reported. May be irritating to vulva
2. Causes
    - a. gonorrhea
    - b. trichomona vaginailis
3. Treatment
    - a. douche only on doctors orders
    - b. preparations of gentian violet

STEP III. APPLICATION:

Discussion

A. What are minor complications?

B. How can the young mother be taught to use common sense in preventing these?

STEP IV. TEST:

Circle the correct number

1. In pregnancy morning sickness is most common during which of the following periods:
   A. First month
   B. First 6 weeks
   C. 6th--12th week
   D. First 4 months

2. A nurse should suggest to the patient who complains of morning sickness that she might overcome this discomfort by using remedies to help:
   A. Emptying the stomach
   B. Washing the stomach
   C. Eating 6 small meals instead of 3 per day

3. An ace bandage is frequently used:
   A. To support the breast
   B. As an abdominal binder
   C. As pressure bandage in varicose veins of the legs

4. To aid in prevention of ankle edema and varicose veins the pregnant woman should be instructed to wear:
   A. A maternity corset
   B. Low-heeled, laced shoes
   C. Garter belt instead of circular garters

5. Frequency of urination during early and late weeks of pregnancy is due to:
   A. Pressure on the bladder by uterus
   B. Pressure on the kidneys by uterus
   C. Increased amount of urine excreted by kidneys

SUMMARY:

As we have shown here there are several minor discomforts of pregnancy which when the young mother understands them and is instructed during her early pre-natal visits can off set some of them so that the nine months of pregnancy could be a joy instead of a burden.

This lesson plan was prepared by:
Mrs. Mary E. Ferris, R. N., Instructor, Copperhill, Tennessee

INSTRUCTOR'S LESSON PLAN

Lesson 8 of 32
Key

NAME OF LESSON: Toxemias

AIM OF LESSON: To teach the toxemias during pregnancy

REFERENCES:
Handbook of Obstetrics, Zabriskie and Eastman
Maternity Nursing, Bleier
Simplified Nursing, Thompson and LeBaron

MATERIALS: Test-one copy for each class member

INSTRUCTIONAL AIDS: Chalkboard

STEP I: INTRODUCTION:

We are beginning the study of Toxemias during Pregnancy. We have already studied the minor complications. The major complications can occur early in pregnancy or late in pregnancy, despite the good prenatal care and medical care. It is possible for every woman to avail herself of prenatal care, be it private or clinical basis to insure a safe pregnancy.

STEP II. PRESENTATION:

Points of Information	Key Points
A. Hyperemesis Gravidarum	Excessive vomiting during first months of pregnancy
1. Causes	1. Not entirely determined 2. Emotional factor
2. Symptoms	1. Nausea and vomiting a. early morning 2. Loss of weight
3. Treatment	1. Dry diet a. crackers, toast b. small serving every 2-hours 2. Intravenous fluid 3. Sedatives 4. Psychotherapy 5. Levine tube if necessary

B. Preeclampsia	A toxemia of pregnancy which preceedes the development of eclampsia that occurs 2 or 3 months of pregnancy.
1. Causes	1. Hypertension 2. Protein or albumin in urine
2. Symptoms	1. Sudden weight gain 2. Edema 3. Persistent headaches 4. Blurring of vision or spots before eyes 5. Decreased urinary output 6. Vomiting
3. Treatment	1. Salt poor diet 2. Complete bed rest 3. Intake and output chart 4. Daily urine examination 5. Weigh patient a. before breakfast 6. Daily blood pressure reading 7. Diuretic and antihypertensive drugs
4. Complications	Artificial induction of labor
C. Eclampsia	Severe form of toxemia during which the patient has convulsions and is in coma
1. Causes	1. Hypertension 2. Protein or albumin in urine
2. Prevention	1. Early prenatal care 2. Early treatment of preeclampsia
3. Symptoms	1. Sudden weight gain 2. Edema 3. Sudden increase in blood pressure 4. Blurred vision 5. Decreased urinary output 6. Epigastric pain 7. Vomiting 8. Muscular twitching 9. Convulsion 10. Coma

4. Treatment	1. Salt poor diet 2. Complete bed rest 3. Intake and output chart 4. Protect patient from external stimuli, as noises, etc. 5. Keep room darkened 6. Have mouth gag at bed side 7. Side rails 8. Daily blood pressure readings 9. Diuretic and antihypertensive drugs 10. Sedatives
5. Nursing Care	1. Protect patient from self injury, side rails 2. Patient never to be left alone 3. Have mouth gag at bed side 4. Never give fluids by mouth if unconscious 5. Room darkened and noise kept to minimum 6. Watch for signs of labor 7. Careful record intake and output chart 8. Keep record of duration of convulsion, depth and duration of coma 9. Note character of respirations 10. Check fetal heart tones
6. Prognosis	1. Maternal mortality 10-20% 2. Fetal mortality 50%
D. Chronic Hypertensive Vascular Disease	Chronic disorder of the vascular system
1. Causes	1. Hypertension - whether pregnant or not 2. Albumin in the urine 3. Most are multiparae with several children
2. Prevention	1. Prevent pregnancy or limit pregnancies 2. May be necessary to interrupt pregnancy 3. Ligation of fallopian tubes 4. Some method of contraception

3. Symptoms	1. Headaches 2. High blood pressure 3. Examination of retina, may show narrowing of the arterioles
4. Treatment	1. Salt poor diet 2. Complete bed rest 3. Intake and output chart 4. Daily blood pressure readings 5. Diuretic and antihypertensive drugs

STEP III. APPLICATION:

A. When does morning sickness occur?	First three months, may have nausea, but no vomiting
B. What are some of the reasons for nausea?	Basal metabolism lower at beginning of pregnancy, reflected in the intestinal tract
C. What are the danger signs of an expectant mother?	1. Swelling of the feet, face and hands 2. Headaches which are continous 3. Nausea and vomiting which continue past the first few weeks 4. Dimness or blurring of vision
D. What time during pregnancy do signs and symptoms of preeclampsia appear?	During the last trimester
E. Name at least three early symptoms	1. Edema, face, feet and hands 2. Sudden weight gain 3. Dizziness and headache
F. List at least three treatments of preeclampsia	1. Salt free diet 2. Daily blood pressure reading 3. Intake and output chart
G. In the event all treatments fail what must be done?	Terminate the pregnancy
H. How can preeclampsia be prevented?	Good prenatal care during pregnancy Report early symptoms to doctor

STEP IV. TEST:

1. Treatment for mild morning sickness includes:
   a. Dry crackers upon arising
   b. High fat diet
   c. Three large meals a day
   d. Avoidance of high protein diet

2. A pregnant woman was brought into the hospital with hypertensive disease. The nurse would understand that this disease might also be associated with kidney disease because at this time:
   a. The conditions were present previously but aggravated by the added strain of pregnancy.
   b. Pregnancy might cause previously normal kidneys to become damaged because of added strain.
   c. Pregnancy could cause kidney damage because of excess poisions which are irritating fetal waste products that must be excreted.

3. The emergency room called the floor that a patient with eclampsia would be admitted:

   For which of the following should the nurse make preparation?

   a. Have mouth gag at bed side
   b. Immediate induced labor
   c. Have side rails on bed
   d. Give fluids freely by mouth
   e. Have room darkened, noise kept to minimum
   f. Watch for labor

   1. a, b, c, e
   2. a, c, e, f
   3. all except f
   4. all of these

4. What would be the most important thing for a pregnant woman to tell the Doctor?
   a. About her nausea and vomiting
   b. Swelling and puffing around her eyes
   c. Heartburn

SUMMARY:

During the last three decades, the mortality rate of expectant mothers and new born babies have dropped sharply in the United States. Two important reasons are:

1. Public aware of good prenatal care, medical care during pregnancy,

to insure safe pregnancy and delivery and a healthy baby.

2. Establishments of maternity centers throughout the United States make it possible for every woman to avail herself of prenatal care, private or clinic patient.

This lesson was prepared by:
Freda Gill, R. N. Kingsport, Tennessee

INSTRUCTOR'S LESSON PLAN

Lesson 9 of 32
Key

NAME OF LESSON:	Abortions
AIM OF LESSON:	To help the student understand the definition and terminology of abortions. To give the student a basis for understanding the nursing principles involved in the care and prevention of different types of abortions.
REFERENCES:	Handbook of Obstetrics - Zabriskie and Eastman pp. 403-409
INSTRUCTIONAL AIDS:	Stages of Abortion (Illustrations to pass out)
EQUIPMENT:	Opaque Projector

Step I. INTRODUCTION:

Abortion is defined as the expulsion of the products of conception before the fetus is viable. Any interruption of pregnancy prior to the 28th week is known as an abortion.

Some authorities, however, restrict the use of this term to the first 12 weeks and refer to the premature termination of pregnancy after the placenta is formed as a miscarriage.

The term abortion, as employed by physicians and nurses, includes all varities of termination of pregnancy prior to viability whether the process was spontaneous or artificially induced.

The lay groups are inclined to associate the word "abortion" with criminal interference, therefore the term carries a definite stigma. The word "miscarriage" is used to designate spontaneous abortions.

Step II. PRESENTATION

Points of Information		Key Points
A. Causes of Abortions		
1. Ovular	61.7%	Abnormalities of some of the ova may be secondary to faulty condition in mother
2. Maternal	38.3%	

a. Poor progesterone pattern	Due to a lack of progesterone, the endometrium may fail to develop an adequate progestational pattern or an adequate decidua.
b. Abnormal implantation	This will interfere with the nutrition of the ovum after it is implanted.
c. Dies and acts as foreign body	Proper development fails and the ovum dies. It then acts as a foreign body within the uterus and will stimulate the uterus to contract. Because of the many factors involved, it is not easy to determine whether the cause is ovular or maternal.
3. Other causes a. Acute infections b. Heart failure c. Malposition of uterus d. Hemorrhagic complications of pregnancy	Many spontaneous abortions are due to causes other than defects in the product of conception; little is known about these.
B. Stages of abortion	
1. Threatened abortion 2. Inevitable 3. Incomplete 4. Complete	There are four stages of an abortion. Use illustrations under opaque projector and explain.
C. Types of abortions	There are four types of abortions:
1. Missed abortion	1. The fetus dies in the uterus and is not expelled. Two months or more elapse between death and expulsion
2. Habitual abortion	2. Condition in which abortion occurs in successive pregnancies (3 or more) and at least the same stage of gestation.

3. Criminal abortion (Minimum estimate annually in the U.S.A. is 100,000.)	3. Means instrumental induction of abortion without medical or legal justification.
4. Therapeutic abortion (Modern medicine and treatment are making these cases rare)	4. Instrumental induction of abortion by a physician because of some grave maternal disease which would make continuation of the pregnancy hazardous

D. Treatment

1. Complete-incomplete abortion	Absolute bedrest, surgery in certain cases, progesterone in some cases.
2. Control bleeding	Oxytoxics under certain conditions
3. Prevent infection	Antibiotic
4. Relieve pains	Narcotic drugs

E. Nurse's Responsibility

1. Maintain asepsis	Even if the patient is already infected
2. Assist physician	With examination
3. Educate patient	Concerning hygienic measures
4. Withhold judgment	Concerning criminal interference, therapeutic or habitual abortions

Step III. APPLICATION:

A. Define abortions.

B. Name the types of abortions and discuss how they differ.

C. List the four stages of an abortion.

D. Which stage is the most dangerous to the mother? Why?

E. Explain and discuss why a nurse should be very careful when using the terms "abortion" and miscarriage in the presence of lay individuals.

Step IV. True-False Test Encircle T or F

(T or F) 1. The term abortion as employed by physicians and nurses, includes all varieties of termination of pregnancy prior to viability whether the process was spontaneous or artificially induced.

(T or F) 2. One of the main causes of abortions is due to faulty conditions in the mother.

(T or F) 3. Due to the many factors involved, it is not easy to determine whether the cause of an abortion is ovular or maternal.

(T or F) 4. Surgery is indicated in the fourth stage of an abortion.

(T or F) 5. Hemorrhage is greatest in the first stage of an abortion.

(T or F) 6. Any induced abortion is considered illegal.

(T or F) 7. The laity use the word miscarriage to designate spontaneous abortions.

(T or F) 8. Oxytoxics are used to contract the uterus.

(T or F) 9. In the threaten stage progesterone may be given.

(T or F) 10. The therapeutic abortion is legal, therefore, it is the only one permitted by the Roman Catholic Church.

SUMMARY:

In this lesson we have learned a number of things:

1. Definition of words such as abortion, miscarriage, viable, gestation and others
2. Types of abortions
3. Stages of an abortion
4. Treatments indicated

5. Nurse's responsibility and attitude

6. Causes of abortions

Tomorrow we are going to disucss another hemorrhagic complication of pregnancy, Aburptio Placenta.

This Lesson Plan was prepared by:
Mrs. Rowena Goode, R.N., Instructor, Chattanooga, Tennessee

INSTRUCTOR'S LESSON PLAN

Lesson 10 of 32
Key

NAME OF LESSON: Placenta Previa

AIM OF LESSON: To give the student nurse a good understanding of the condition, the symptoms and nursing care involved.

REFERENCES: Maternal and Childhealth, Kalafatich and Meeks
Testbook of Obstetrics and Obstetrical Nursing, Bookmiller and Bowen

MATERIALS: Test: One copy each member

INSTRUCTIONAL AIDS: Chalk Board. Pictures from reference book or drawings.

Step I. INTRODUCTION:

What makes a normal pregnancy so interesting? Isn't it because we are always thrilled and excited in the "baby" which will arrive in due time? What about placenta previa, which we are going to study today? Isn't it interesting too because it deals with pregnancy and of a condition which can complicate the pregnancy and birth of the baby?

Step II. PRESENTATION

Points of Information	Key Points
A. Definition of placenta previa	Condition where placenta lies so low in uterus that it presents at the internal os of cervix.
B. Location of placenta (Show pictures or drawings of each)	1. Normal placenta (High in uterus - posterior wall) 2. Low implantation of placenta (Edge of placenta just reaches internal os) 3. Partial placenta previa (Internal os partially covered)

4. Total placenta previa (Placenta completely covers internal os)

C. Frequency

1. Statistics vary:
   a. Ratio of 1-105, 1-134, 1-160 pregnancies
   b. 10 times more frequent in multiparas than primiparas

D. Symptom

1. Painless bleeding:
   a. In last 3 months of pregnancy
   b. More frequent in 8th month
   c. No cause

E. Management of Patient

1. Hospitilization of patient
   a. For study and diagnosis
   b. Control of hemorrhage
   c. Replace blood loss

2. Bedrest
   Do not disturb patient too much as clotted blood helps stop hemorrhage

3. Sedation
   Keep patient quiet so bleeding will not increase or if has stopped not start again

4. Blood typed and crossmatched
   Replace blood loss.

5. Vaginal examination may be necessary for certain diagnosis
   a. Patient to delivery or operating room to insure complete asepsis.

   b. Personnel and equipment ready for any procedure indicated by exam

F. Termination of Pregnancy

1. Abdominal delivery-Cesarean section Preferred - safer for mother and baby
2. Vaginal delivery
    a. Danger to baby 5 times greater
    b. Low implantation, not too much bleeding

G. Duties of Nurse

1. Impress on all prenatal patients importance of notifing doctor if any bleeding occurs.
2. If patient at home - to hospital per ambulance
3. Never do rectal on bleeding patient
4. No enema Danger further bleeding might occur
5. Watch patient closely
    a. Never leave alone
    b. Watch for increased bleeding
    c. Keep patient quiet
6. Give moral support and allay her fears
7. Blood transfusion equipment available

Step III. APPLICATION

Ask students if they have any questions. If no questions, here are some to ask students.

A. Describe location of placenta in placenta previa.
B. What is symptom of placenta previa?
C. What are some of things done in management of patient?

Step IV. Test

Multiple Choice:

A. If patient has vaginal bleeding in the last 3 months of pregnancy, the nurse should advise her to

1. Go to hospital
(2.) Call the doctor
3. Wear a pad
4. Take ergot

B. Placenta previa occurs more frequently in patients who

1. Are primiparas
(2.) Are multiparas
3. Belong to a race other than white race
4. Are elderly primiparas

C. The symptom of placenta previa is

1. Nausea and vomiting
(2.) Painless bleeding
3. Severe adbominal pain
4. Toxemia

Discussion questions:

D. What is placenta previa? Describe the location of placenta in low implantation, partial and total placenta previa.

E. What are some of the nursing duties of the nurse in caring for patient with placenta previa?

SUMMARY:

Placenta previa is one of the complications which may occur in the last three months of pregnancy and which is more common in multiparas. The symptom of placenta previa is painless bleeding and without cause. The patient should be hospitalized immediately for diagnosis and treatment. The treatment consists of control of hemorrhage, replacement of blood loss and termination of pregnancy usually by Cesarean Section. Tomorrow we will discuss Abruptio Placenta.

This lesson plan was prepared by:
Mrs. Marion Helms, Instructor, Humboldt, Tennessee

INSTRUCTOR'S LESSON PLAN

Lesson 11 of 32
Key

NAME OF LESSON: Ablatio Placenta (Abruptio Placenta)

AIM OF LESSON: To develop in the mind of the student the knowledge necessary:

1. In the differentiation of Abruptio Placenta from Placenta Previa.
2. To instill into the student's mind the information necessary for proper patient care.

REFERENCES:
Lippencott's Quick Reference Book for Nurses -- Young and Lee
Obstetrics--Greenhill, pp. 473-484
Textbook of Obstetrics and Obstetric Nursing-- Bookmiller and Bowen pp. 258-262

MATERIALS: Diagrams showing the three types of placental separation. (Have mimeographed copy of enclosed drawing for each student. Drawing may be found on pp. 259 of Bookmiller and Bowen.) Also use diagram showing 4 types of placenta previa on p. 251 of Bookmiller and Bowen.

INSTRUCTIONAL AIDS: Reference books listed (For use of pictures and diagrams.) Opaque projector
Chalkboard and chalk (if desired for drawing purposes)

Step 1. INTRODUCTION:

Abruptio Placenta is the premature separation of a normally implanted placenta. The separation may be complete, but more often is incomplete, occurring either in the late months of pregnancy or at the beginning of labor. The bleeding may be apparent or concealed. (Discuss difference between Abruptio Placenta and Placenta Previa). Give students copies of diagram or use opaque projector.

Step II. PRESENTATION

Points of Information	Key Points
A. Frequency	The average incidence of this complication has been given as one in 248 cases. At Bellevue

Hospital a diagnosis of premature separation was made in 201 cases out of a total of 16,761 deliveries, or an average of one in every 83 deliveries.

With external hemorrhage the complication is not often fatal to the mother, although fetal mortality is high. When the hemorrhage is internal or concealed, the incidence of both fetal and maternal mortality equals, or exceeds, that occurring from any of the other fairly frequent complications of pregnancy.

B. Etiology

The cause is usually unknown. Toxemia of pregnancy frequently is present. Other factors may be; maternal vascular disease, endocrine imbalance, vitamin deficiency, etc.

C. Symptoms

The significant one is localized pain over the uterus with hemorrhage, which appears in varying degrees in all but a small percentage of cases. Pain over the uterus occurs in 75 per cent, accompanied by a rigid uterus in 62 per cent. Where hemorrhage is concealed, the uterus is usually ligenous in character and the shock is out of proportion to the apparent hemorrhage.

D. Pathology

The hard woody consistency of the uterus is due to the extravasation of blood between the muscle fibers. The presence of this blood prevents normal contraction of the uterine muscle and results in uterine bleeding.

The uterus has a "black and blue" appearance, as first described by Couvelaire in 1912.

E. Diagnosis

The differential diagnosis must rule out placenta previa and therefore, a vaginal examination should be done in the operating room with preparations for a cesarean operation. Other conditions to be ruled out are rupture of the uterus, advanced ectopic pregnancy, pelvic tumor with torsion, and acute appendicitis.

F. Management

Prophylactic therapy is good prenatal care. This may prevent development of toxemia.

The patient should be hospitalized. She should have a blood grouping and an RH determination. Blood should be procured and be available before any further procedure is instituted. The physician keeps in mind that shock should be treated first and operative procedures started only when patient's improved condition justifies it, and not earlier.

In the management of premature separation of the placenta, as in other complications, it is believed that the treatment selected should be suited to the patient's individual requirements and condition. Patients with internal bleeding, who have a favorable cervix are kept under close observation and treated conservatively. Patients with external bleeding are also treated by following a conservative course. On the other hand, as a life-saving measure for the mother, whether the fetus is alive or dead, patients with internal hemorrhage, a board-like uterus and an unfavorable cervix should have a cesarean operation after control of shock is assured.

G. Duties of the nurse

The same nursing procedures apply in the management of this complication as in placenta previa. The patient should be hospitalized as soon as possible and her physician notified immediately.

Upon admission to the hospital she should recieve the usual preparations. An enema is seldom given because of the danger of promoting hemorrhage.

The nurse should record the blood pressure and pulse rate and if the patient is in shock, she should institute the usual shock therapy; keeping the patient very quiet and warm. She should also have the necessary equipment ready for blood transfusion.

The patient is quite apprehensive and bleeding accentuates her anxiety. The nurse should remain with the patient constantly as her presence will have a calming influence. The nurse should use her skill and ability to reassure the patient that she is being well cared for and that every possible thing is being done for her safety.

Step III. APPLICATION

Have each student go to the delivery room ledger and choose the name of a patient with this condition. She will then go to the record room, read the patient's chart carefully, and turn in a written report on this chart to the instructor.

Step IV. TEST: Abruptio Placentae

Directions:

Complete the following statements by encircling the letter preceding the correct answer or answers.

1. Abruptio placentae is the premature separation of a normally implanted placenta.

    (a) The separation may be complete, but more often is incomplete.
    b. The separation occurs during the first trimester of pregnancy.
    (c) The bleeding may be apparent or concealed.
    (d) Abruptio placentae usually occurs either in the late months of pregnancy or at the beginning of labor.

2. The most outstanding symptom of a typical case of abruptio placentae is:

    a. Sudden hemorrhage
    (b) Sudden severe abdonimal pain
    c. Extremely high blood pressure
    d. Violent fetal movements

SUMMARY:

Review the main points of the lesson briefly and introduce the next lesson topic.

Subsequent lesson should be Diseases Complicating Pregnancy.

This lesson plan was prepared by:
Mrs. Jean Keel, Instructor, Nashville, Tennessee

INSTRUCTOR'S LESSON PLAN

Lesson 12 of 32
Key

NAME OF LESSON: Diseases Complicating Pregnancy

AIM OF LESSON: To acquaint the student with diseases that may occur during pregnancy.

REFERENCES:
Nurses Handbook of Obstetrics--Zabriskie and Eastman
Simplified Nursing--Thompson and LeBaron
Textbook of Obstetrics and Obstetrical Nursing--Bookmiller and Bowen

MATERIALS:
Test:
One copy for each student
Pamphlets on Veneral Diseases and Tuberculosis from the local Health Department

INSTRUCTIONAL AIDS:

Step I. INTRODUCTION:

Unfortunately pregnancy does not confer immunity to infections or communicable diseases. However, when the care of the patient is well supervised there is less liklihood of complications from these diseases.

Step II. PRESENTATION

Points of Information	Key Points
A. Tuberculosis	1. Mother is not allowed to nurse the baby
1. Incidence of tuberculosis in pregnancy. (1.85)	2. Careful post-partum follow-up should be stressed to the mother before dismissal from the hospital
2. Therapy depends on the state or activity of the disease	
3. Delivery and post-partum care also depends on the activity of the disease	
4. Early diagnosis and treatment has greatly deceased the mortality and morbidity rate of the mother	

B. Diabetes Mellitus	
1. The percentage of diabetic mothers has increased since the advent of insulin.	1. Young people with diabetes died before reaching the childbearing age.
2. Complicating factors a. Hypoglycemia b. Toxemia c. Accidents to the fetus	2. Babies of diabetic mothers are heavier and the mortality rate is higher. 3. Babies require special observation and laboratory testing after delivery
3. Careful supervision in the prenatal period is important to maintain diet and weight control	
4. A medical doctor usually works closely with the obstetrician during the prenatal period	
C. Syphilis	
1. Test should be made early in pregnancy for syphillis	1. Continue to urge pregnant women to have early prenatal examination
2. Treatment should be started before 24 weeks of gestation has elapsed.	2. Careful observation of the newborn baby for signs of congenital syphilis
3. Penicillin and the heavy metal drugs are still the main methods of treatment.	
4. Syphilis still accounts for a large number of stillborn babies	

D. Gonorrhea
   1. Gonorrhea is not a fatal disease.

1. Stress treatment
2. Observation of excessive vaginal drainage during the pre-natal period
3. Importance of treatment to eyes of newborn to prevent blindness

   2. Chief complication is:
      a. The danger of infection of the eyes of the baby
      b. Excessive or increased vaginal discharge

E. Heart Diseases
   1. Heart diseases are greatly aggravated by pregnancy
      a. Careful medical supervision is necessary in addition to obstetrical care.
      b. Type of delivery would be determined by the two medical specialists.
      c. Modern medicine has made it possible for many cardiac patients to deliver safely

1. Undue excitement or activity should be avoided
2. The use of stimulants should be avoided
3. Patient should be encouraged to follow the doctor's orders as to diet, rest and exercise

F. Other Communicable Diseases
   1. Some communicable diseases have no specific effect or no proven effect but if possible all should be avoided.

   2. Measles and German measles have commonly noted serious effects
      a. Measles has accounted for a large number of abortions and premature babies
      b. German measles--more serious complications such as,

congenital deformities, especially in the first trimester of pregnancy

Step III. APPLICATION:

A. Class Discussion
B. Question - Answer Period

Step IV. TEST:

1. What special nursing care should be given to the tuberculosis patient during delivery and post-partum care?

2. List 2 complications of diabetes during pregnancy.

3. List 2 complications of measles.

4. When is German measles most dangerous to the pregnant woman?

5. What injection is sometimes considered a protective after exposure to measles?

SUMMARY:

Modern medicine has enabled women with many diseases to deliver safely with adequate medical care and strict adherence to their doctor's orders.

ASSIGNMENT: The Phenomenon of Labor

This lesson plan was prepared by:
Mrs. Helen LeFever, Instructor, Springfield, Tennessee
Mrs. Lois Lambert, Instructor, Nashville, Tennessee

INSTRUCTOR'S LESSON PLAN

Lesson 13 of 32
Key

NAME OF LESSON: Labor

AIM OF LESSON: To teach the students the definition, cause and signs of labor.

REFERENCES: Delees Obstetrics for Nurses, Davis, M. Edward, Carmon, Mabel C., pages 206-210
Simplified Nursing, LeBaron, Margaret, Thompson, Ella M., pages 313-314

EQUIPMENT: Opaque Projector

INSTRUCTIONAL AIDS: Picture showing before and after lightening. Chalk board and chalk.

Step I. INTRODUCTION:

"The bravest battle that ever was fought;
Shall I tell you where and when?
On the maps of the world you'll find it not;
It was fought by the mothers of men"

Joaquin Miller
DeLee's Obstetrics for Nurses,
page 206

Step II. PRESENTATION:

Points of Information	Key Points
A. Labor	
1. Definition	The process by which the fetus, placenta, secundines are expelled through the natural passages.
2. Cause	Unknown, but thought to be due to endocrine changes
3. Duration of labor	12-18 hours normally, usually longer for a primipara due to the rigidity of soft parts.
4. Factors that may influence labor	1. Age 2. Number of children 3. Physical condition

	4. Position of baby 5. Mental attitude 6. Size of baby 7. Trimester of pregnancy 8. Sedation
B. Premonitory Symptoms	
1. Definition	Warning signs of approaching labor:
2. Signs	
a. Heavy feeling	1. Tires easily
b. Walk	2. Laborious gait
c. Stools	3. Low back pain
d. Urination	4. Frequency of urination
e. Discharge	5. Mucus from the genitals
f. Pains	6. Fleeting pains in the abdomen
C. Distinct signs	
1. Lightening	
a. Definition	"Dropping" of the baby's head into the pelvic area
b. Time of occurrence	Last two weeks of pregnancy:
c. Changes occurring in the mother	1. Waistline lower 2. Stomach flatter 3. Navel more prominent 4. Easier breathing 5. More difficulty in walking 6. Frequent urination 7. Constipation 8. Show picture of woman before and after lightening
2. False pains	
a. Definition	Premonitory contractures which are misleading
b. Occurrence	Last few weeks of pregnancy. More frequently seen in multiparas
c. Description	Irregular contractures that have no rhythmicity or pattern and vary in intensity
d. Purpose	Obliteration of the cervix and cervical canal

3. Show	
a. Definition	Thick, blood stained mucus from the vagina
b. Occurrence	Few hours to twenty-four hours before labor, or may be absent or appear during labor
c. Observations which may indicate complications	1. Bright red color 2. Foul odor 3. Presence of meconium 4. Presence of blood clots or tissue

Step III. APPLICATION:

1. What is labor?
2. What are the premonitory symptoms of labor?
3. What are the distinct signs of labor?
4. What are the observations of "show" which may indicate complications?

Step IV. TEST: Circle correct answer or answers:

1. Labor is the process by which
   a. The baby is removed from the uterus.
   b. The baby is expelled through the natural passages.
   (c.) The baby, placenta and secundines are expelled through the natural passages.

2. The cause of labor is
   a. Due to metabolic changes.
   (b.) Unknown.
   c. Due to contraction of abdominal muscles.

3. Labor normally lasts longer in
   a. Multiparas.
   (b.) Primiparas.

4. Some factors which may influence labor are
   (a.) Mental and physical condition.
   (b.) Age.
   c. Sex of the baby.
   d. Weight of the mother.
   (e.) Size of the baby.

5. Premonitory symptoms include
    a. Constipation
    (b.) Frequency of urination
    c. Bloody discharge

6. Distinct signs of labor are

    (a.) Lightening
    b. Loose stools
    (c.) False labor
    (d.) Show

7. Some changes that occur in the mother's appearance just prior to labor

    a. Waistline larger
    b. Difficult breathing
    (c.) Easier breathing
    (d.) Navel more prominent

8. False pains are

    a. Regular contractures without purpose
    (b.) Irregular contractures that vary in intensity
    (c.) Serve to obliterate the cervix and the cervical canal

9. Factors to observe during " show" which may indicate complications are

    (a.) Bright red color
    (b.) Foul odor
    (c.) Clots and tissue
    (d.) Presence of meconium

10. "Show" is best described as

    a. White, watery mucus
    (b.) Thick, blood tinged mucus
    c. Dark red, foul smelling mucus

This lesson plan was prepared by:
Mrs. Peggy Long, Instructor, Knoxville, Tennessee

INSTRUCTOR'S LESSON PLAN

Lesson 14 of 32
Key

NAME OF LESSON: Uterine Contractions

AIM OF LESSON: To help the learner to understand the activity of the uterus in the process of delivery.

REFERENCES: DeLee's Obstetrics for Nurses, 16th Ed., pp. 199-299
Davis and Sheckler
Practical Nursing, pp. 559, 560 Rapier, Koch, et al.

MATERIALS: Chalkboard, chalk

INSTRUCTIONAL AIDS: Birth Atlas, pelvis model

Step I. INTRODUCTION:

This lesson is to acquaint you with the meaning of uterine contractions and the significance of these movements in a normal delivery. When and where these occur in labor is important.

Step II. PRESENTATION:

Points of Information	Key Points
A. Definition	Uterine--refers to uterus. The organ in which the baby is carried. Contractions--movements with a feeling of bearing down.
B. Information	At the onset of regular, rythmical contractions, most women enter the hospital
C. Time or duration	The movements of the uterus occur at regular intervals with almost an equal spacing between them. The patient is taken to the labor room, as this is the time at which labor has advanced to just time for delivery. The movements have increased strength and become closer together.
D. Labor room	The patient must be prepared during the period of uterine contraction both physically and mentally.

E. Fears and anxieties	Explanation of the use of contractions must be explained so the patient will have less fear as the movements or contractions become more forceful. The aim at this time is to relieve fears and anxieties so the patient will have a more relaxed labor.
F. Rest and food	The patient is watched closely as to when the contraction occurs and the duration. Rest periods are very important between the contractions, which to the patient means severe pain in the back radiating to the lower abdomen. The abdomen becomes very firm as the uterus contracts, after the firmness leaves the patient should rest. Liquids are given in early stages of contractions. The body needs food and liquids to avoid dehydration.

Step III. APPLICATION:

A. Discuss questions students may ask.

B. Explain perineal preparation.

C. How to time contractions with nurses watch.

D. Explain checking fetal heart tones.

E. Discuss fears that patients might possess.

Step IV. TEST:

1. Explain timing of contractions.

2. What symptoms would need to be observed with uterine contractions?

3. What are some fears an expectant mother may possess?

4. When during the time the patient is having contractions would the fetal heart tones be checked? Why?

SUMMARY:

This lesson is not intended to explain pain - only one of the signs of advanced labor. The way in which contractions are recognized is very important. All pains in pregnancy are not contractions.

This lesson plan was prepared by:
Mrs. Louise Loy, Knoxville, Tennessee

INSTRUCTOR'S LESSON PLAN

Lesson 15 of 32
Key

NAME OF LESSON: Natural Childbirth

AIM OF LESSON: To show the student practical nurse the importance of the aims and accomplishments of the program for natural childbirth.

REFERENCES:
Family Centered Maternity Nursing--Ernestine Wiedenbach
Nurses Handbook of Obstetrics--9th Edition Zabriskie and Eastman
Understanding Natural Childbirth--Herbert Thoms, M.D., Lawrence Roth, M. D., and David Lenton

INSTRUCTIONAL AIDS: Birth atlas, pictures of specific exercises found in reference book, and film, "Human Reproduction," if not shown previously.

Step I. INTRODUCTION:

If you were an expectant mother, how would you like to witness the actual birth of your baby? Let us think how this might be accomplished.

Step II. PRESENTATION

Points of Information	Key Points
A. Clarification of term, "Natural Childbirth"	Misconception (no pain)
B. Review of female reproductive system	1. Structure 2. Function 3. Fertilization 4. Period of ovulation (time counted from expected menstrual date.)
C. Signs and symptoms of pregnancy	1. Presumptive signs 2. Probable signs 3. Positive signs
D. The father	1. His approval, interest and cooperation 2. Assuming heavier household duties, grocery shopping, etc. 3. Attending class with wife

E. Visit to doctor	1. Explain necessity of medical attention a. Physical examination b. Abnormal occurrences (1) Correction, if any (2) Avoidance of others c. Lecturers by doctor (1) Diet, work, rest and recreation (2) Physical changes during pregnancy (3) Hygienic habits, clothing
F. Exercises	To prepare for labor 1. Breathing 2. Relaxation 3. Contraction and relaxation of pelvic floor muscles 4. Posture 5. Schedule
G. Labor	Childbirth without fear, ~~active~~ participation by mother, putting into practice the exercises she has learned
H. First stage of labor	1. Longest stage (18 hours) upper uterus contracts, pulling up the sides of the lower uterus so that cervix fits more tightly over the baby's head. 2. Straining and pushing is of no value at this stage. Mother should be able to take full advantage of periods between contractions to rest.

3. Husband participation
    a. Moral support
    b. Rubs mother's back during contractions
    c. Times contractions

4. Possibility of the need for sedation must be considered during this stage and the next.

I. Second stage of labor

From complete dilatation of the cervix through birth of baby

1. Length--usually 2 hours for first baby and 1 hour for subsequent deliveries

J. Third stage of labor

Delivery of placenta--expelled usually 13-30 minutes after birth of baby.

1. During this stage, mother is awake and enjoying the experience of watching her baby in its first moments of life.

Step III. APPLICATION:

A. In one column let us list the organs of the female reproductive system. In another, list the pertinent changes that take place in each during pregnancy.

B. How can a nurse help a woman in late pregnancy, who is distressed by various fears?

Step IV. TEST:

A. The exercise developed by Dr. Thoms at Yale University included in the program of Natural Childbirth, have as the main purpose:

    1. Teaching the patient how to relax.

    2. Informing the patient of physiological changes during pregnancy.

    3. Developing intra-abdominal space for uterine enlargement.

B. In addition to exercise given during the prenatal period, the pregnant patient needs during labor:

   [✓ 1.] Sympathetic care

   2. Heavy sedation

   3. An understanding of the progress of labor

C. Which week of pregnancy should the nurse begin teaching the exercises in the prenatal clinic?

   1. Sixth

   2. Tenth

   [✓ 3.] Fourteenth

   4. Thirty-sixth

D. The nurse teaching parent classes should stress which of the following:

   [✓ 1.] The idea of sharing responsibilities in parenthood.

   2. The cause of invalidism during pregnancy.

   3. The moral responsibility of being a parent.

   4. Husbands doing housework during pregnancy.

Note: Correct answer encircled.

SUMMARY:

Natural Childbirth not experienced without pain. Planned program directed toward childbirth with understanding and support rather than childbirth without fear. Special emphasis is placed on physical and mental preparation of the expectant mother.

The next lesson will be a detailed discussion of the stages of labor and the nursing care in each stage.

This lesson plan was prepared by:
Mrs. Virginia Coughlin, Instructor and Mrs. Elizabeth Person, Instructor
Jackson, Tennessee

INSTRUCTOR'S LESSON PLAN: Lesson 16 of 32
Key

NAME OF LESSON: The First Stage of Labor with Appropiate Nursing Care

AIM OF LESSON: To develop in students an understanding of the first stage of labor and a knowledge of skills required to care for a patient in the first stage of labor.

REFERENCE: Maternity Nursing A Textbook for Practical Nurses, Bleier
Simplified Nursing, LeBaron and Thompson

MATERIALS: Test - One copy per student. Nurses notes - one sheet per student of the type used in the affiliating hospital.

INSTRUCTIONAL AIDS:

1. Film VE 1292 Labor and Childbirth - 15 minutes Medical Arts Production, 116 Cordell Hull Building
2. Chalk board and chalk
3. Fetoscope
4. Tray as used in hospital for obstetrical perineal shave

Step I. INTRODUCTION:

We have had already a study of labor including its definition, causes and definite signs. Today we will see a film showing an actual patient in the first stage of labor. During this showing note signs of the first stage of labor and nursing care given this patient.

Step II. PRESENTATION:

Points of Information	Key Points
A. Film	1. Signs of first stage of labor 2. Nursing care given in film
B. Admission of Obstetrical Patient to Unit	1. Routine information a. Immediate event leading to hospitalization b. Expected date of confinement and etc.

2. Routine obstetrical preparation
   - a. Perineal shave
   - b. Vital signs including fetal heart tones
   - c. Examination by doctor
   - d. Enema

C. Care and Observation in labor room

1. Timing of contractions
2. Checking of vital signs
3. Keeping patient dry and comfortable
   - a. Vaginal discharge
   - b. Bladder distention
   - c. Vomiting
4. Assisting with examinations
   - a. Rectal
   - b. Vaginal
5. Attending to fluid needs
   - a. Oral
   - b. Parenteral
6. Charting on nurses notes

D. Encouragement and support

1. Instructional information to patient
   - a. Understanding of childbirth as a normal body function
   - b. Helping herself during first stage of labor

2. Constant understanding and reassurance

E. Precautions

1. Side rails
2. Danger signs
3. Continuous close observations

F. Use of drugs

1. Natural childbirth
2. Hypnotics
3. Analgesics
4. Amnesics
5. Tranquilizers
6. Oxytoxics

Step III. APPLICATION:

Discussion questions

1. What patients would you expect to have the longest first stage of labor? Why?
2. What are some danger signs you are to watch for and report immediately?
3. When do we know a woman has gone into the first stage of labor?
4. Why do we wait for the doctor's examination before we give the enema?

Step IV. CHECK UP OR TEST:

Circle the appropriate response

T (F) 1. During the first stage of labor it is good for the mother to take a deep breath and hold it to push with each contraction.

(T) F 2. Contraction and relaxation of the uterus can be more accurately determined by the nurse placing her hand on the patient's abdomen than by the patient's reaction.

(T) F 3. The patient in active labor is not given solid food.

T (F) 4. Pitocin is a drug used to relax the uterus.

(T) F 5. Sparine is an example of a drug used to intensify the action of an analgesic.

6. Which is not a sign of the onset of the first stage of labor?
   - (a.) Lightening
   - b. Show
   - c. Regular contractions
   - d. Rupture of the bag of water

7. A patient is not allowed to expel an enema in the bath room if:
   - (a) Her bag of water has ruptured
   - b. She is in premature labor
   - c. She is a multipara
   - d. She has a history of miscarriages

8. Which of these fetal heart tone readings would you report immediately?
a. 140 c. 120
b. 160 (d.) 100

9. This drug causes loss of memory
a. Atropine
b. Morphine
c. Sparine
(d.) Scopolamine

10. Mrs. Jones's last normal menstrual period started January 15th., 1961. When is her expected date of confinement?
a. April 8, 1962 (c.) October 22, 1961
b. April 22, 1962 d. October 8, 1961

These questions I would include in a test covering this and other parts of the unit at the end of the complete unit.

SUMMARY:

The first stage of labor begins with the onset of regular uterine contractions, rupturing of the bag of water, or the appearance of pink show. It ends with the complete dilitation and effacement of the cervix. It is usually in this period that the mother comes to the hospital and is made ready for the actual birth of her infant. Your assignment for tomorrow is the second stage of labor. You can find this is your Simplified Nursing by LeBaron and Thompson in the same chapter with the first stage. This is also covered in Maternity Nursing, a Textbook for Practical Nurses, by Bleier pages 50-54.

This lesson plan was prepared by:
Mrs. Rachel Prislovsky, Instructor,
Memphis, Tennessee

INSTRUCTOR'S LESSON PLAN

Lesson 17 of 32
Key

NAME OF LESSON: Second Stage of Labor and Nursing Care

AIM OF LESSON: To aid the student in understanding the fetal progress, physiology of labor, signs and symptoms and the need for good nursing care.

REFERENCES: Practical Nursing Today--Esau, Follow, Phillips, Tourtillott
Simplified Nursing--Thompson and LeBaron

MATERIALS: Leaflets, pictures, posters, printed material, labor charts

INSTRUCTIONAL AIDS: Films, textbooks, labor room, fetoscope, stirrups, delivery room, labor bed, stretcher, receiving blanket, beads or tape, crib card

Step I. INTRODUCTION:

Lecture to help the student recall the progress of the patient during the first stage of labor and how nature in her dramatic way enters the second stage causing the expulsion of the fetus and a child is born.

Step II. PRESENTATION:

Points of Information	Key Points
A. Fetal progress in utero by contractions of the abdominal and uterine muscles	Lecture and group discussion on labor contraction
B. Rupture of the membranes and discharge of ammiotic fluid	1. Note: a. Time b. Record c. Signs of maternal complications
C. Close observations, timing and recording contractions	1. Demonstration: a. Labor room supervisor b. Return by student

D. Fetal heart rate	1. Positioning: a. Patient b. Fetascope 2. Rate a. Listening b. Counting c. Recording
E. Preparing patient for examination	1. Demonstration a. Positioning patient b. Proper draping 2. Help patient relax between contraction
F. Keeping patient informed of her progress	Discussion on the supportive and understanding concern the nurse should have for a patient in labor
G. Descent and crowning	Explain to students and assist team leader with checking patient
H. Moving patient to delivery room	Proper handling of labor bed or stretcher
I. Prepare for delivery	1. Patient a. Position b. Shave perineum c. Wash and rinse vaginal area d. Apply sterile drapes
J. Precautions necessary to prevent injury to mother and baby during delivery	1. Physical environment a. Properly prepared b. Properly supervised 2. Nursing care a. Alert to any fetal distress b. Maternal distress c. Religious beliefs
K. Birth of baby	Assist patient, head nurse, and doctor as needed.

L. Crede's Treatment	Use every precaution not to injure baby's eyes
M. Application of name	Proper use of beads or tape to prevent any mistake
N. Removal to newborn nursery	Keep warm, handle carefully and apply crib card

Step III. APPLICATION:

1. What is meant by fetal progress in utero?

Ans. The forcing down of the baby through birth canal by contractions of uterus and abdominal muscles.

2. If meconium is released into the ammiotic fluid, what is it a sign of?

Ans. Fetal distress due to the lack of oxygen which causes the baby to fight for his life.

3. What is the range scale of the fetal heart rate?

Ans. 120-160 per minute with the average 140 per minute.

4. What is meant by "Descent and Crowning"?

Ans. Descent: Moving downward of the baby's head into the pelvis.
Crowning: Presentation of the baby's head, or (drawn), at the vaginal opening.

5. Why is an episiotomy done during this stage of labor?

Ans. To provide a larger opening at vaginal orifice to facilitate delivery.

Step IV. TEST:

Directions:

Read statement carefully and blot out corresponding number on answer. There is only one answer to each question.

1. At what time do the membranes rupture and discharge ammiotic fluid in normal delivery?
   - a. End of 1st. stage of labor.
   - b. Just before head of baby is delivered.
   - *c. Early in the 2nd. stage of labor.
   - d. Beginning of labor.

2. Which of the following should the practical nurse report immediately to the doctor?
   a. Time membranes ruptured.
   b. Patient voiding involuntarily.
   *c. Changes in fetal heart rate.
   d. Increase in labor contractions.

3. How long does the 2nd. stage of labor last usually for primipara?
   *a. 1-2 hours
   b. 30 min. 1 hour
   c. Very short
   d. None of these

4. Which of the following does the doctor do as soon as the baby is born?
   a. Slap him on the buttock to make him cry.
   *b. Cleans mucus from nose and throat
   c. Tie or clamp umbilical cord
   d. Show him or her to mother

SUMMARY:

1. Understanding the changes taken place in the mother's body.

2. The need for close observation and alertness to any emergency that may arise.

3. After care of both mother and baby following delivery.

Assignment for next lesson:

Third stage of labor

*Correct answer

This lesson plan was prepared by;
Mrs. Betty Richardson, Instructor, Memphis, Tennessee

INSTRUCTOR'S LESSON PLAN

Lesson 18 of 32
Key

NAME OF LESSON:	Management of Third Stage of Labor
AIM OF LESSON:	To develop the knowledge and understanding of the third stage of labor and the nursing care involved.
REFERENCES:	DeLees Obstetrics for Nurese, Davis and Sheckler, 16th Edition, pages 238-249 Principles and Practices of Obstetrics, DeLee and Greenhill 9th Edition, pages 268-279 Simplified Nursing, Thompson and LeBaron, 7th Edition, pages 152-153, 314-320
INSTRUCTIONAL AIDS:	Birth Atlas, anatomy charts, chalk board

Step I. INTRODUCTION:

Review of the first and second stages of labor. The third stage of labor is the period from the delivery of the baby until delivery of the placenta and membranes. At this period the actual delivery is terminated, but included is the control of hemorrhage as it is so important at this stage.

Step II. PRESENTATION:

Points of Information	Key Points
A. Mechanism of expulsion of placenta and membranes	Separation and expulsion
B. Patient needs during this period	If not anesthestized continues to bear down
C. Inspection of placenta by doctor	Tears will cause hemorrhage
D. Fundus	Location, character, massage
E. Medicines	Ergotrate, pitocin
F. Immediate nursing care of mother	Fundus, perineal care
G. Return to room	Massage, flow, blood pressure, pulse, respiration, post-anesthesia recovery

H. Baby	Sex, time of birth, eye care, cord care, identification, general condition.
I. Records	Information about delivery, condition of mother, condition of baby should be put on chart.

Step III. APPLICATION:

A. What causes the placenta to be expelled?

B. What nursing care would the mother require during this time?

C. Why does the doctor inspect the placenta?

D. Where should the fundus be at this time?

E. Describe the immediate nursing care of the mother after the delivery of the placenta?

F. What information is included in the charting?

Step IV. TEST:

A. Answer the following questions.

1. Define the third stage of labor.
2. What symptoms should the nurse watch for after the placenta is expelled?
3. How should the uterus feel after the placenta is expelled?

B. Complete the following statements.

1. Uterine and abdominal contractions cause the expulsion of the placenta.
2. The placenta is attached to the uterine wall.
3. Medicines are given after the delivery of the placenta to contract the uterus.

4. If there is uterine hemorrhage the uterus will be soft.

5. After the third stage of labor the main nursing care is control of hemorrhage.

SUMMARY:

The third stage of labor terminates the actual delivery period and starts the postpartum period. The immediate nursing care is the comfort of the patient and the control of hemorrhage, so that the mother will be in the best of health to start caring for her baby. This is when the prenatal education of the mother in the care of her baby starts its actual practice and we will start in our lesson tomorrow.

This lesson plan was prepared by:
Mrs. Lonell Seay, Instructor
Savannah, Tennessee

INSTRUCTOR'S LESSON PLAN

Lesson 19 of 32
Key

NAME OF LESSON: Operative Delivery

AIM OF LESSON: To acquaint the student with indications for surgery, the methods used, the preparation of the patient before, during and immediately after an operative delivery.

REFERENCES:
Film "Normal Birth", VE 1290
Medical Arts Production
Cordell Hull Building
Nashville, Tennessee
Obstetric Management and Nursing, Woodard, Gardner and others
Simplified Nursing, Thompson and LeBaron

MATERIALS:
Test
Daily assignment sheets

INSTRUCTIONAL AIDS: Film, Charts, Chalk and Chalk Board, Preparation tray, Sphygmomanometer, Fetoscope

Step I. INTRODUCTION:

Explain to students that many of the complications of pregnancy can be prevented, others noted and planned for in advance and some unforseen problems treated as emergencies. Give an example of several different types and have discussions.

Step II. PRESENTATION:

Points of Information	Key Points
A. Indications	1. Dystocia a. Primipara - over 24 hours b. Multipara - over 18 hours
	2. Breech a. Transverse position in uterus b. Meconium in fluid
	3. Fetal distress a. Change in F.H.T. b. Too fast or too slow

	4. Excessive large baby 5. Placenta Previa 6. Abrupto Placentae
B. Selection of Operation	Determined by doctor 1. Induction of labor 2. Episiotomy 3. Cervical incision 4. Vaginal hysterectomy 5. Forceps 6. Version 7. Breech extraction 8. Caesarean section 9. Embryotomy a. If permitted by religious beliefs
C. Preparation of patient	1. Review of Nursing Arts a. Catheterization b. Enema if ordered c. Vital signs d. Perineal shave or abdominal or both e. Sterile preparation after patient on table
D. General precautions	1. Patient usually typed and crossmatched for possible transfusions; blood held in bank 2. Antibiotics ordered by doctor 3. Close check of vital signs 4. Check for excessive bleeding
E. Prevention of injuries	1. Side rails to bed and recovery stretcher 2. Nurse in attendance at all times while patient under sedation

Step III. APPLICATION:

Discussions:

A. Material in textbook
B. Instruments to be used for set-up
C. Articles found in sterile packs and how to put together
D. Scrub for surgery in obstetrics
E. Demonstrate sterile technique for dressing of doctor and nurse
F. Students return procedures taught and demonstrated

Step IV. TEST:

Questions--Essay type

1. Describe procedure of admission of patient to delivery room.
2. How does doctor determine need for operative delivery?
3. List articles you need to assemble for sterile preparation of patient and safety precautions used.
4. At what stage is the sterile preparation and surgery usually done for emergencies, and for planned deliveries?
5. Where in your hospital are the Caesarean sections performed? How is baby delivered?

SUMMARY:

General review of all subjects covered in this area. The next assignment will be the immediate post-operative and post partum nursing care.

This lesson plan was prepared by:
Mrs. Margaret Hough, Instructor
Memphis, Tennessee

INSTRUCTOR'S LESSON PLAN

Lesson 20 of 32
Key

NAME OF LESSON:	Post partum Care
AIM OF LESSON:	To teach the Practical Nurse student how to care for mothers during post partum period and give an understanding of the normal post partum period.
REFERENCES:	DeLee's Obstetrics for Nurses, Davis Rubin, Obstetrics for Nurses, Fitzpatrick & Eastman pp. 183-200 Maternity Nursing, Bleier 58-69
MATERIALS:	Test, one copy for each student
INSTRUCTIONAL AIDS:	Films-- "Nursing Care During Puerperium" "Post partum Care" "All My Babies" Chalkboard, reproductive manual, posters, nutritional and exercise charts

Step I. INTRODUCTION:

The six to twelve weeks following the delivery of the baby up to the time the reproductive organs of the mother return to normal is called the puerperium or post partum period. The changes occuring within the mother's body during this time involves loss of weight, restoration of the abdominal and perineal, muscle tonus, and involution of the uterus.

Step II. PRESENTATION:

Points of Information	Key Points
A. Immediate care after delivery	1. Admission to post partum floor 2. Take blood pressure, pulse 3. Check fundus 4. Check perineal pad
B. Environment	1. Quiet, conducive to sleep, rest 2. Well-ventilated 3. Attendance

C. Emotional adjustment of mother
  1. Post partum blues three to four days
     a. Slight depression
     b. Attention of family and friends to a new baby
     c. Beset with self-doubt and feelings of inadequacy
     d. Worry about husband attitudes toward baby
     e. Older children at home
     f. Tired, worn out from pregnancy and labor
  2. Role of nurse, supportive
     a. Encouraging
     b. Help gain confidence in skills
     c. Sympathetic listener
     d. Warmth and understanding
     e. Help realize she will be able to handle situation

D. Physical changes occuring during post partum
  1. Involution of uterus
  2. Regain abdominal muscle tone
  3. Lactation continue in nursing mother
  4. Return of menstruation

E. General care
  1. Care of the perineum
     a. Observation for signs of hemorrhage
     b. Lochia
     c. Care of uterus
     d. Perineal care, observation
     e. Breast care

  (Each of the above will be discussed separately)

  2. Elimination
     a. Urinary retention
     b. Measure urine, check
     c. for adequate output

    - c. Patient
        - (1) Inspect for distended bladder
        - (2) Urged to void within six to eight hours after delivery
    - d. Bowels
        - (1) Constipation common
        - (2) Mild laxative for SS enema

3. Diet
    - a. Nutrients to include
    - b. Food to omit-if disagree
    - c. Nursing mother (3000) calories
    - d. Non-nursing mothers-no supplement needed
4. After pains
    - a. Definition
    - b. Occurrence, frequency
    - c. Importance of reporting
5. Medications
    - a. Analgesic drugs
    - b. Lactating-inhibitors
    - c. Oxytoxics
6. Exercise
    - a. Activity in bed encouraged
    - b. Early ambulation
    - c. Inadvisable to let the patient sit on the bed with legs dangling when getting up
    - d. Gradual increase in activity and getting outdoors. Cautioned against overfatigue
7. Positions
    - a. Change of position and exercise encouraged
        - (1) Lying flat on bed raising head
        - (2) Lying flat on back, raising first one foot then the other against tightly tucked in bedclothes

8. Ambulation
    a. 24 hours after delivery
    b. Favorable effects
        (1) Hasten involution
        (2) More rapidly increasing lochia
        (3) Improved circulation
9. Discharging patient from hospital
    a. Hospital routine
10. Instruction to the mother
    a. General hygiene
        (1) Sleep, rest
        (2) Tub baths
        (3) Sexual activity
        (4) Resume activity gradually
        (5) Menstruation
        (6) Shower
        (7) Normal diet
        (8) Lifting-stairs
11. Post partum examination
    a. Six weeks after delivery
    b. Emphasize its importance; encourage the hesitant patient
    c. Purposes
        (1) For comparison of condition
        (2) To give advice
        (3) To answer questions (write down at home)

Step III. APPLICATION:

A. Define post partum.

B. What is the difference between diets for nursing and non-nursing mothers?

C. Give the role of the nurse in emotional adjustment of mother.

D. List the physical changes that takes place during post partum.

E. What instructions would you give a mother upon discharge?

F. What favorable effects may be gained from early ambulation?

G. Give 3 purposes of post partum examination.

H. Name some contributing factors of post partum blues.

Step IV. TEST:

1. Immediate care after delivery would include all except:
    a. Admission to post partum floor.
    b. Count of fetal heart tones
    c. Blood pressure and pulse
    d. Check fundus, perineal pad

2. The return of pelvic organs to normal is called involution.

3. Instructions to the mother would include all except:
    a. General principles of hygiene
    b. Care of baby
    (c) Watching signs of labor
    d. Instruction of formula making

This lesson plan was prepared by:
Mrs. Ruth Smith, R.N., Instructor
Knoxville, Tennessee

INSTRUCTOR'S LESSON PLAN

Lesson 21 of 32
Key

NAME OF LESSON: Care of the Perineum during the Puerperium

AIM OF THE LESSON: To instruct the student practical nurse in the importance of perineal care and the acceptable procedures in carrying out this care.

REFERENCES:
Maternity Nursing, Bleier, ch. 13, pp. 55-63
Nurses Handbook of Obstetrics, Eastman, Zabriskie ch. 19, pp. 438-445
Simplified Nursing, LeBaron, Thompson, ch. 26, p. 321

MATERIALS: Perineal Care Tray, Chase Doll

INSTRUCTIONAL AIDES: Chalk Board, Charts, Film: "Post-Natal Care", 16 mm., sd., B.W., 10 min. VE-1291, Trade and Industrial Education, Department of Education, Nashville, Tennessee

Step I. INTRODUCTION:

There is much discussion concerning the best way of caring for the perineum during the first days after delivery. Perineal Care is no longer the elaborate procedure it used to be. Hospital techniques differ greatly, and doctors do not entirely agree on the method to use. Although every hospital has its own techniques, the basic principles of perineal care can be used with various techniques.

Step II. PRESENTATION:

Points of Information	Key Points
A. Purpose:	
1. To cleanse the perineum and external genitalia	1. Wash and dry hands
2. To promote healing	2. Take perineal care equipment to bedside
3. To prevent infection	3. Lower the bed when ready to give perineal care
4. To give comfort to the patient	4. Do not expose patient unnecessarily
	5. Instruct the patient not to hold hands on perineal area

6. Have solution at body temperature
7. Clean genitals with firm, but gentle strokes from front to back
8. When perineal pad is used, apply from front to back
9. Put all debris in paper bag and carry from patient's room

B. When used:
   1. Perineal care is given to both ante partum and post partum patients
   2. Complete perineal care every morning; following voiding, defecation, or enema
   3. When perineum is inflamed or patient is uncomfortable from profuse discharge or complains of burning

Step III. APPLICATION:

Procedure:

A. Equipment:

   1. Tray
      a. One sterile covered pitcher
      b. One package of sterile perineal pads
      c. One can of sterile cotton balls (dry)
      d. One can of green soap sponges
      e. One sterile forceps in Zepharin solution 1-1000
      f. Newspaper square or paper bag

B. Solution Used:

   1. Aqueous solution of Zepharin 1-2000
   2. Lypol solution 1/4%
   3. Normal saline
   4. Sterile water
   5. Kloamine 1/4% solution

C. Important Steps:

1. Assemble necessary supplies and set up tray	1. Sterile perineal pads are secured from central supply room 2. Prepare about 500 cc of solution to be used 3. Test temperature of solution by pouring over wrist, should be about body temperature
2. Take tray to bedside	1. Place tray on bedside table 2. Screen patient
3. Place patient on bedpan	1. Bedpan cover should be placed on door of bedside table 2. Place paper bag convenient for debris
4. Remove soiled pad	1. Remove pad from front to back; folding soiled side in and discarding in paper bag 2. Note character of discharge 3. Wash hands 4. [illegible]
5. Secure sterile pad from package	Hold pad between thumb and forefinger
6.. Place three green soap sponges in palm of hand	
7. Place seven dry cotton sponges in fold of pad	
8. Fold top bed linen down to patient's knees	
9. Use green soap sponges	1. Clean vulva with soap sponges as needed; use sponge only once with a front to back stroke 2. Discard in paper bag

10. Pour solution over vulva	Test temperature of solution by pouring a small amount on upper inner thigh before pouring over vulva
11. Use cotton balls to dry vulva	1. Take cotton balls from perineal pad not touching pad with fingers 2. Dry vulva by using downward strokes or patting motion from front to back 3. Dry patient down center; discard sponge 4. Dry distal labia using one stroke from front to back; discard sponge 5. Dry labia on near side using same method as 11.4 6. Use cotton ball to dry groin using downward stroke
12. Assist patient to turn off of bedpan	1. Ask patient to turn on side away from nurse 2. Place bedpan on bottom shelf of bedside table
13. Dry anal region with cotton ball	Observe sutures when drying around anus
14. Dry buttocks with last cotton balls	Apply presecribed ointment or spray to sutures at this time
15. Apply perineal pad from front to back	
16. Assist patient into a comfortable position and straighten bed linens	Leave unit in order
17. Take tray and equipment to utility room	

18.	Empty bed pan, clean and sterilize	Flush bed pan well with cool water; wash with soap and water if needed. Rinse, sterilize and place in bed side stand.
19.	Discard paper bag of waste materials in waste receptacle	Wash hands thoroughly
20.	Reset tray with standard equipment	
21.	Record treatment on chart-nurses notes	

Step IV. TEST:

Have student return satisfactory demonstration of perineal care.

This lesson plan was prepared by:
Mrs. Virginia Stone, R.N.
Chattanooga, Tennessee

INSTRUCTOR'S LESSON PLAN

Lesson 22 of 32
Key

NAME OF LESSON: Complications of the Puerperium

AIM OF LESSON: To teach the student that there can be serious complications in the puerperium and to help her understand the need for and the method of good postpartum nursing care.

REFERENCES:
Maternity Nursing, Bleier pp. 70-72
Obstetric Management and Nursing, Woodard, Gardner, Bryant and Overland, pp. 703-724
Simplified Nursing, Thompson and LeBaron, pp. 323-324

MATERIALS: Textbook and Chalk board

Step I. INTRODUCTION:

The most serious complications of the puerperium are hemorrhage, infections and thrombophlebitis. Measures must be directed toward the prevention of the complications by giving intelligent and careful attention to the mother.

Step II. PRESENTATION:

Points of Information	Key Points
A. Post partum hemorrhage	
1. Definition	1. Bleeding from reproductive tract at any time following delivery of placenta and before first normal menstrual period
	2. Classed as immediate (within 12 hours. of delivery), intermediate (within a week of delivery), and late (subsequent to one week following delivery)

2. Causes

a. Uterine atony	1. Define 2. List causes 3. Usually immediate hemorrhage 4. Discuss prevention a. Foresee possibility b. Frequent observation of patient c. Palpation of uterus d. Massage of uterus e. Oxytocics 5. Treatment a. Same as prevention b. Blood transfusions as necessary c. Rarely hysterectomy
b. Retention of placental fragments	1. Usually frank hemorrhage is intermediate or late 2. D and C may be necessary
c. Tears	1. Differential point in diagnosis; bleeding continues when uterus is firmly contracted 2. Uterus and vagina must be palpated and bleeding point sutured if possible 3. Hysterectomy may be necessary 4. Vaginal packing may be indicated if superficial vaginal tear
d. Tumors	1. Fibroids only tumors which commonly cause hemorrhage 2. Packing or hysterectomy usually required
e. Blood dyscrasias	1. Only rarely cause bleeding 2. Treatment directed toward dyscrasias

f. Subinvolution	1. Commonest cause of intermediate hemorrhage 2. Uterus remains large and boggy and may bleed freely during first month of post partum 3. Usually responds favorably to Ergotrate
3. Nursing care of post partum hemorrhage	1. First 12 hours following delivery most dangerous period of entire pregnancy 2. Important that the nurse have full knowledge of type of labor, delivery and anesthesia 3. Note state of consciousness, pulse rate, blood pressure, and condition of uterus (shape, size, and consistency) frequently 4. Gentle but firm pressure on the uterus serves to expel clots (this should not be done if a uterine or vaginal pack is in place) 5. Carry out each individual physicians orders to the letter 6. List and discuss danger signs 7. Use comfort measures
B. Puerperal infections	1. One of the main causes of death due to childbirth 2. The severity of infection and whether infection occurs or not depends upon a. The virulence of the organisms b. The resistence the body can offer them c. The number of organisms 3. Discuss history of "Childbed fever and Ignaz Semmelweis theory" of cause and prevention

1. Causes of lowered resistance in the patient	1. Poor general condition at time of labor due to toxemia or anemia, long labor, loss of blood and lacerations or abrasions of birth canal 2. Retained placental fragments and blood clots, predispose by supplying material on which the organisms can grow 3. Organisms can come from within body or from without 4. Infection from outside the body is more common
2. Types of infections	
a. Localized infection	1. Predominate symptoms and signs a. Fever appears on 3rd or 4th day and is around 103° and 104° b. Rapid pulse c. Pain and tenderness in pelvic region may be mild or severe d. Lochial changes 2. May be limited to endometrium 3. May spread to peritoneum, tube or ovary
b. General infections	
(1) General peritonitis	1. May come on primarily from spread through lymphatics with little or no evidence of pelvic involvement or may follow local conditions 2. Temperature high and continuous 3. Pulse rapid and weak 4. Death may ensue in few days

	5. In mild cases, symptoms gradually subside and infection may become localized 6. Carries highest death rate
(2) Septicemia	1. Characterized by presence and growth of organisms in blood stream 2. Temperature usually 105° or more 3. Pulse rapid and weak 4. Delirium is common 5. Patient usually quite free of pain 6. Death may occur in few days 7. May eventually recover or die after long-drawn-out infection
(3) Thrombophlebitis	1. Mild temperature elevation ranging from 99°-101° F for first 10-14 days 2. About 10th day or later pain may be felt in groin or thigh and is accompanied by a rise in temperature 3. Thrombus may become dislodged and become an embolus to the lung. Fortunately this is rare but may be immediately fatal 4. Swelling of leg may disappear in about 2 weeks or may remain for months
(4) Diagnosis of puerpural infections	Largely a matter of ruling out other causes of fever
(5) Prognosis	Depends on violence of infecting organism and the resisting power of the patients
(6) Prevention	1. Stress importance of adequate prenatal care so that mother is free from disease at time of delivery

	2. Conserve patients strength during labor 3. Rigid asepsis 4. Nurses role--scrupulous personal hygiene 5. Nurse should not work if she has cold or skin infection
(7) Treatment	1. Essentially supportive 2. Antibiotics 3. Early recognition of illness important 4. Isolation of patient to prevent cross infection
C. Breast infections	1. Not frequent but distressing to the patient 2. May occur at anytime during lactation
1. Predisposing causes	1. Cracked, chafed nipples or bruising of nipple and breast 2. Improper or unclean handling of the breast
2. Aqtual cause	Entrance of bacteria into breast via of nipple or blood stream
3. Symptoms	1. May be local or general 2. Elevated temperature often very high (105° F.), frequently onset is marked by chill 3. Pain is definite feature 4. Locally there may be tender swelling 5. Abscess may form
4. Prognosis	Good except in severe inflammation or when breast abscess is part of general infection

5. Active treatment	1. Baby should be weaned at once 2. Support and ice caps relieve discomfort 3. Codeine or morphine may be required to relieve pain 4. Antibiotics 5. Incision and drainage of abcess may be indicated

Step III. APPLICATION:

A. Questions from teacher to student

B. Class discussion:

1. What is the most common cause of post partumhemorrhage?

2. What are the causes of uterine atony?

3. Discuss the nurses role in the prevention of puerperal infection.

4. What are the types of puerperal infection?

5. What are the symptoms of mastitis?

6. What is the most important point in the prevention of puerperal infections?

Have period of questions from student to instructor.

Step IV. TEST:

Directions: Chose the one correct answer

1. Of those listed the nurses prime responsibility during the first twelve hours of the puerperium is to:
   a. Check the fundus at frequent intervals
   b. Relieve the afterpains with codeine
   c. Give hot drinks to induce voiding
   d. Give perineal care

2. During the puerperium the first sign of infection is most frequently detected by an increase in:
   a. Temperature

b. Pulse rate
c. Lochial discharge
d. Blood pressure

3. If treatment for sore and cracked nipples is not instituted immediately the patient will probably develop:
    a. Caked breasts
    b. Engorged breasts
    c. Mastitis
    d. Breast abscess

4. A nurse working on the maternity department may:
    a. Remain on duty if she has a cold but wears a mask:
    b. Remain on duty if she has a cold and is working on the post partum floor but may not work in the nursery or delivery room
    c. Not remain on duty if she has a cold
    d. Remain on duty if she has a skin infection

SUMMARY:

The complications of the puerperium can be very serious, even fatal. The nurse has an important role in the prevention of these complications. She must be mindful of the probability of hemorrhage or infection, know the danger signs and report to the doctor, at once, any sign of trouble.

This lesson plan was prepared by:
Mrs. Dorothy Vickers, Memorial Hospital
Clarksville, Tennessee

INSTRUCTOR'S LESSON PLAN

Lesson 23 of 32
Key

NAME OF LESSON: Breast Care and Early Ambulation

AIM OF LESSON: To give an understanding of the importance of good breast care after delivery, also, what early ambulation can accomplish for the patient.

REFERENCES: Obstetric Management and Nursing, Woodward, Gardner, Bryant and Overland, p. 298
Zabriskies Obstetrics for Nurses, Fitzpatrick and Eastman 10th Edition, pages 293-303

MATERIALS: Breast pump, ice caps

INSTRUCTIONAL AIDS: Mrs. Chase--Breast poster from Deval Rubber Co.

Step I. INTRODUCTION:

Do you know the purpose of early ambulation after delivery? Why must we, as nurses, give good breast care to the mother?

Step II. PRESENTATION:

Points of Information	Key Points
A. Early ambulation	Close supervision
1. Description	
a. Time allowed out of bed	
2. Purpose	
a. Stimulates circulation	
b. Stimulates elimination	
c. Aids drainage	
3. Bathroom privileges:	Cleanliness
a. Stress personal hygiene	
b. Teach self perineal care	
B. Breast care	Clean hands and breast
1. Colostrum	
a. Acts as cathartic for baby	

b. Gives food value to baby	
2. Engorgement a. Occurs 2-3 days after delivery b. Avoid massage, rubbing or pressure	1. Relief of pain 2. Breast binder 3. Ice caps
3. Nursing mothers-Lactation a. Good breast support b. Avoid emotional disturbances c. Care of nipples d. Adequate diet e. Avoid infections f. Good nursing schedule	1. Rest 2. Good personal hygiene
4. Breast pump a. Correct use b. Measure and record amount obtained c. Avoid bruising breast tissue	1. Clean hands 2. Clean breast
5. Manual expression of milk a. Teach mother b. Avoid bruising breast tissue	Stress personal hygiene
6. Drying up breast after delivery a. Restrict fluids b. Breast binders c. Medications d. Ice caps	Comfort of mother
7. Breast exercise a. Correct time to teach	

Step III. APPLICATION:

A. Have students demonstrate on Mrs. Chase the correct way to check breast after delivery.
B. Have students demonstrate use of breast binders.
C. Have students demonstrate use of breast pump.

Step IV. TEST:

1. What is lactation?
2. What can be done to help the patient during painful engorgement?
3. Why is cleanliness of the nurse of vital importance to nursing mothers?
4. Why is colostrum important to the new baby?

SUMMARY:

1. Review the main points of the lesson.
2. Stress the importance of good hygiene for the mother and the nurse.

This lesson plan was prepared by:
Mrs. Vera Storey
South Pittsburg, Tennessee

INSTRUCTOR'S LESSON PLAN

Lesson 24 of 32
Key

NAME OF LESSON: Immediate Care of the Newborn

AIM OF LESSON: To teach the immediate care of the newborn

REFERENCES: Zabriskies, Obstetrics for Nurses, Fitzpatrick, Eastman pp. 270-273
Maternity Nursing, a Textbook for Practical Nurses, Bleier pp. 77-81

EQUIPMENT: Clean crib containing: baby's linen, wash cloth, thermometer in antiseptic, lubricant, sterile water in bottle; sterile cotton balls, paper measuring tape, sterile basin, small cake ivory soap, scale with scale paper. Baby's record.

INSTRUCTIONAL AIDS: Chalk board, posters, pictures

Step I. INTRODUCTION:

Today we are going to discuss the immediate care of the newborn infant. This includes care done by the doctor in the delivery room and care by the nurse and pediatrician in the nursery.

Step II. PRESENTATION

Points of Information	Key Points
A. Clean air passage	Done by doctor immediately after delivery of the head
B. Care of the cord	Hospitals employ various techniques but regardless of the technique, it is imperative that frequent inspection be done to note any of the signs of bleeding and strict aseptic precautions be utilized in caring for the cord stump
C. Care of eyes	As soon as respirations are established and cord care given, the eyes should recieve prophylactic treatment, for

	protection against opthalmia neonatorum. Drugs used vary with the hospital. This is required by law.
D. Identification	Is applied before the baby or mother leaves the delivery room. The type of identification varies with the hospital.
E. Weight, measurement and initial bath	As soon as the baby is brought to the nursery these should be done immediately. These procedures are carried out with varying details in different hospitals, but the basic steps are the same in all hospitals
F. Observation for abnormality	Physical observation by doctor in the delivery room. The nurse observes both physical and symptomatic abnormalities. Within twenty-four hours the pediatrician gives a thorough examination

Step III. APPLICATION:

A. When should the air passage be cleared in the care of the newborn?

B. Why is care of the cord so important?

C. Why is prophylaxis for the eyes for the newborn required by law in most states?

D. When is identification done on the newborn infant?

E. Who is responsible for observing for abnormalities?

Step IV. TEST:

1. Which should be done first in the immediate care of the newborn?
   a. Care of the cord
   b. Care of the eyes
   (c) Clearing of the air passageway
   d. Identification

2. Which is most important in care of the newborn?
   a. Technique approved by the hospital
   b. Keep the cord stump covered
   c. Application of alcohol sponge to the stump
   (d.) Frequent inspection to note any signs of bleeding and strict aseptic technique.

3. It is important to care for the eyes because:
   a. It is required by law
   (b.) It is protection against opthalmic neonatorum
   c. It helps the baby to see better
   d. It was ordered by the doctor

4. Identification should be applied:
   a. When the baby is carried to the nursery
   b. After it is examined by the pediatrician
   c. Before the initial bath
   (d) Before the baby or the mother leaves the delivery room

5. Weight, measurement and initial bath is the responsibility of:
   (a) The nurse
   b. The doctor
   c. The aides
   d. The pediatrician

SUMMARY:

We have talked about the immediate care of the newborn which included clearing of the air passageway, care of the cord, care of the eyes, identification, weight, measurement and initial bath and observation for abnormality.

This lesson plan was prepared by:
Miss Selena Watson, R.N., Instructor
Memphis, Tennessee

INSTRUCTOR'S LESSON PLAN

Lesson 25 of 32
Key

NAME OF LESSON: General Observations in Care of the Newborn

AIM OF LESSON: To prepare the student to give efficient nursing care to the newborn baby.

REFERENCES: Practical Nursing Procedures, Bien, Ruth V.
Zabriskie's Obstetrics for Nurses, Fitzpatrick and Others

MATERIALS: Chalkboard, infant chase doll, and chart depicting the types of stools (from Ross Laboratories).

STEP I. INTRODUCTION:

After the newborn has been transferred to the nursery, he is placed in a bassinet with the foot elevated in order to drain mucus from the throat. The baby will not be put to breast until the following day and he is usually given a little sterile water.

There are two methods of caring for the newborn. The older method is in the nursery. This means that the baby is left in the nursery and brought to the mother only for feedings. The other and new method is known as the "rooming-in" plan. In this method, the crib is placed next to the mother's bed and the mother, under supervision, takes care of her own baby.

STEP II. PRESENTATION:

Points of Information	Key Points
A. Place infant in Trendelenburg position.	Keep the crib in this position for twelve hours to facilitate the drainage of mucus from the throat.
B. Check infant for any abnormal conditions.	Observe for condition of the cord, color, respirations, and presence of excessive mucus.

C. Check temperature of the baby q4h.	Temperature must be taken rectally. 1. Normal temperature for baby is from 98°-99° F. 2. Temperature may be elevated if he is too warm, does not get enough water, or has a body disturbance.
D. Protect the babies from infection.	Each baby has his own crib with firm mattress and sides lined with a cloth pad, to protect him from drafts and isolate him from other babies. 1. Doctors and nurses wear masks and gowns. 2. Visitors are not allowed in the nursery.
E. A rash or an irritated area should be reported.	Most newborn babies have some jaundice for a few days, which usually disappears by the second week.
F. Note the type of stool.	During the first 2 or 3 days after birth the stool will be a brownish-green tar like material called meconium.
G. Infant usually voids immediately after delivery or it may be a few hours later.	The first urine is clear, then becomes reddish and concentrated.
H. Newborn sleeps almost all the time but not heavily.	Infant should not be allowed to sleep on abdomen until he is able to turn over, lest he smother.
I. The normal newborn knows how to suck and swallow	He instinctively knows how to do this.

J. Regurgitation is not uncommon	This is the spitting of a little of the feeding. 1. To prevent regurgitation - do not feed too fast, or over-feed. 2. Report projectile vomiting at once.
K. To release air bubbles from baby's stomach.	Sit baby up, supporting head well, or place baby over nurse's shoulder, and pat gently on back.
L. Sometimes the baby is on demand-feeding.	This is self-regulated by self-demand. 1. Infant fed at time and amount he wishes. 2. Normal infants get on a regular schedule in a few weeks.
M. Signs of hunger.	Hunger cries are healthy-sounding cries
N. Should hold baby in arms to bottle feed.	To insure baby's safety
O. Activity of the newborn.	Normal responses of the newborn. 1. Cries and tightens muscles in response to sudden loud sounds. 2. Changes in position 3. Interference with his movements

STEP III. APPLICATION:

A. Practice the correct way of holding baby when bottle feeding.

B. Practice the two correct ways of aiding the infant in releasing air bubbles from his stomach.

C. Define the following: (Orally)
   1. Regurgitation- the spitting up of a little of the feeding without the ordinary efforts at vomiting.
   2. Meconium- feces of the embryo and first intestinal discharge of the newborn.

3. Jaundice- yellowness of the skin, eyes, and secretions, due to changes in the liver cells or obstructions causing the presence of bile pigments in the blood.
4. Self-demand feeding- infant is fed at the time and amount he wishes, within reason.
5. Rooming-in- the crib is placed next to the mother's bed and the mother, under supervision, takes care of her own baby.
6. Trendelenburg- the foot of the bassinet is elevated in order to drain mucus from the throat.

IV. TEST:

Complete the following as indicated:

1. How can you aid the baby to release air bubbles from his stomach?
   Explain. Sit baby up, supporting head well, or place baby over nurse's shoulder, and pat gently on back. This procedure is called "bubbling" or "burping" him. The infant should be "bubbled" after he takes every one to two ounces and again when he is finished, to remove air from the stomach.

2. Describe the normal responses of the newborn?
   a. Moves legs freely
   b. Cries lustily
   c. Infant knows how to suck and swallow

3. What is meconium?
   The first intestinal discharge of the newborn.

4. Name two methods of caring for the newborn. Explain.
   a. In the nursery -- the baby is left in the nursery and brought to the mother only for feedings.
   b. The "rooming-in" method -- the crib is placed next to the mother's bed and the mother, under supervision, takes care of her baby.

5. How does an infant express hunger?
   Crying and hunger cries are healthy-sounding.

6. Define self-demand feeding
   When the baby gets hungry, he is fed. This is self-regulated by self-demand

SUMMARY:

Remember that tender, loving care is necessary to the well-being and growth of the baby. He needs this kind of care as he needs food and warmth and cleanliness.

This lesson plan was prepared by:
Mrs. Jane Darden, Instructor, Memphis, Tennessee

INSTRUCTOR'S LESSON PLAN

Lesson 26 of 32
Key

NAME OF LESSON: Daily Care of the Newborn Infant

AIM OF LESSON: To prepare the student to give daily morning care to the newborn.

REFERENCES:
Obstetric Management and Nursing, Woodward, H. L.
Practical Nursing, Rapier, Koch, and Others
Practical Nursing Procedures, Bien, Ruth V.

EQUIPMENT: Bathing equipment - Tub and bath thermometer

MATERIALS: Towel, clean clothes, washcloth, blankets, oil, lotion, powder, and alcohol

INSTRUCTIONAL AIDS: Infant chase doll in bassinet, chalkboard, and large dolls to be used in practice

STEP I. INTRODUCTION:

The tendency today is more toward giving the newborn baby an oil, rather than a water bath. Most doctors allow a tub bath for a normal baby as soon as the navel is healed. This is usually at the end of the second week. Today sponge baths are given until the umbilicus has completely healed. Mothers leave the hospital so soon after the baby is born that you may not have the opportunity to give him a tub bath in the hospital.

The procedure for bathing a baby differs in individual hospitals. However, you should know the important principles that apply to any baby bath or oiling procedure.

STEP II. PRESENTATION

Points of Information	Key Points
A. Have all equipment ready	Assemble equipment conveniently before you start

B. Be sure that room is warm	Room temperature should be between 75° and 80°. a. Protect baby from drafts.
C. Undress the infant and place on blanket	Note condition a. Observe his body carefully for skin irritation or abnormalities
D. Discard soiled linen	Place in proper containers
E. Weigh the infant, and take temperature	Chart temperature, weight, stools, and general condition
F. Dampen washcloth and wipe infant's eyes	Using corner of cloth, wipe from the nose outward a. If there is any discharge, cleanse with cotton balls and N/S solution.
G. Wash face with clear water	Let nostrils alone a. Nasal secretions are a natural protection
H. Wipe out all creases at the neck, axilla, inner elbows, palms, groin, knees, and buttocks	Use soap and water on badly soiled areas. a. Rinse well b. Remove any cheesy deposit with oil
I. Clean base of the cord with an applicator dipped in alcohol	A dry sterile dressing should be applied
J. Push back foreskin on male babies and cleanse area	Foreskin should be retracted daily to prevent phimosis
K. If baby has been circumcised, remove petrolatum gauze and apply a sterile strip	Remove gauze carefully and check for bleeding
L. Support baby's head and body when you put him in tub	Tub bath is not allowed until umbilicus is healed - usually at the end of two weeks

M. Apply lotion to creases	A rash or an irritated area should be reported
N. Put on diaper and shirt	Fasten diaper below umbilicus and leave cord exposed
O. Wrap infant and replace in crib until feeding time	Baby is wrapped ready to go to mother and a pad is placed under buttocks
P. Clean and care for equipment	Efficient nursing care depends largely upon having equipment ready to use - replace used supplies

STEP III. APPLICATION:

Assign student groups to practice the following procedures using infant chase doll and large dolls as infants; wrapping the baby and placing in bassinet, weighing the infant, supporting the baby properly and placing in tub, and dressing the baby in diaper and shirt.

IV. TEST:

Complete the following statements:

1. The baby is given a sponge bath until the umbilicus is healed.
2. The tendency today is more toward giving the newborn baby an oil bath, rather than a water bath.
3. The temperature of the room during the baby's bath should be between 75 and 80 degrees.
4. The best care of the umbilical cord stump is to clean the base of the cord with an applicator dipped in alcohol and covered with a dry sterile dressing.
5. The foreskin on male babies should be retracted daily to prevent phimosis.
6. Support the baby's head and body when you put him in the tub.

7. The navel is usually healed at the end of two weeks.

8. To wipe the infant's eyes, using a corner of the washcloth, wipe the infant's eyes from the nose outward.

SUMMARY:

Make bathing time for baby a pleasant one. Plan it for a time when he is not too hungry and at least an hour after he has been fed. Handle him gently, giving support to his head and back.

More than half of the babies who die during their first year die in the first month. Some of these disturbances appear as soon as he is born.

INSTRUCTORS LESSON PLAN

Lesson 27 of 32
Key

NAME OF LESSON:	The Premature
AIM OF LESSON:	To become acquainted with the cause, characteristics, and the specific nursing care of the premature.
REFERENCES:	Premature Babies; Their Nursing Care and Management - A. K. Geddes The Premature Infant - Ross Laboratories Zabriskies Obstetrics for Nurses - Fitzpatrick and Eastman
MATERIALS:	Handout sheets of Ross Laboratories - The Premature Infant, Neonatal Respiratory Distress. Tests for each student
INSTRUCTIONAL AIDS:	Ross Wall Charts - The Premature Infant, Neonatal Respiratory Distress.

Step I. INTRODUCTION:

Ask the class what they know about prematures.

What is the premature?	The premature infant is defined as having a birth weight of 5 1/2 pounds or less, regardless of length of gestation

Step II. PRESENTATION

Points of Information	Key Points
A. Causes of prematurity	1. Multiple births 2. Toxemia of pregnancy 3. Antepartum hemorrhage a. Placenta previa b. Abruptio placenta 4. Premature rupture of membranes 5. Combination of poor diet, poor living conditions, overwork and poor health habits

B. Characteristics of the premature

1. Length	Less than 19 inches
2. Weight	Less than 5 1/2 lbs.
3. Lack of subcutaneous fat	Appears to be skin and bone
4. Frail	
5. Limpness	
6. Skin	Red and very thin-lanugo present, fingernails short and thin
7. Musculature	Slight. Often very active
8. Head	Disproportionately large
9. Face	Resembles little old man. Sucking pads prominent
10. Eyes	Protrude
11. Heat control	Poor because heat center in brain is immature
12. Testes	Usually undescended
13. Immaturity	All organs

C. Nursing Care

1. Immediate care	
a. Establishing respiration	Suction, oxygen, humidity. Respiratory stimulants
b. Warmth	Warm blanket and incubator
2. Routine care	
a. Frequent inspection	
(1) Cord	Prematurity predisposes to secondary hemorrhage
(2) Respiration	Retractions and mucus
(3) Skin	
(4) Environment	Temperature, oxygen concentration humidity
b. Temperature, pulse, respiration	Upon admission, according to policy and need of infant
c. Minimal handling	Limit to changes of posture, morning care, physical examination, feeding and suctioning
d. Posture	Side to side. Never leave on back. Never put small prematures on abdomen

e. Feeding	Withhold 24-72 hours
(1) Methods	Gavage, medicine dropper, with rubber tip, bottle and nipple

Step III. Application:

A. What are three causes of premature births?

B.. Describe the premature infant.

C. How does the nursing care of the premature differ from that of the newborn?

Step IV. Test:

1. The major causes of premature birth is
   - a. Cnythroblastosis fetalis
   - b. Multiple births
   - c. Caput succedanum

2. The premature is classified primarily by
   - a. Weight less than 5 1/2 lbs.
   - b. Lack of subcutaneous fat
   - c. Weak cry

3. The premature infant needs to be placed in an incubator or isolette because:
   - a. He is frail and limp
   - b. His temperature regulator is immature
   - c. He would receive more attention there

4. The best position for the small premature is
   - a. Side to side
   - b. Back
   - c. Abdomen

5. The premature should be handled
   - a. Often as possible to make him feel loved
   - b. Each morning by the doctor only
   - c. By the nurse when feeding, suctioning and changing position

This lesson plan was prepared by:
Pat Brown and Shirley Carico, Morristown, Tennessee

INSTRUCTORS LESSON PLAN

Lesson 28 of 32
Key

NAME OF LESSON:	Malformations of the Newborn
AIM OF LESSON:	To develop an understanding of the congenital deformities of the newborn.
REFERENCES:	Care of the Child with Cleft Lip and Cleft Palate -- MacCollum and Richardson - pp. 211-216, The American Journal of Nursing Zabriskies Obstetrics for Nurses -- Fitzpatrick and Eastman, 10th Edition -- 485-487
INSTRUCTIONAL AIDS:	Opaque projector, illustrations, chalk board

Step I. INTRODUCTION:

In approximately one case in 200, an infant is born with some kind of malformation. The graver congenital malformations are always a cause of keen disappointment to the family. The nurse must be especially kind and understanding to the mother. She may tactfully endeavor to direct conversation to other interests.

Step II. PRESENTATION:

Points of Information	Key Points
A. Harelip and Cleft Palate	(Remember to show pictures) 1. Harelip: Congenital incomplete closure of the upper lip. a. May be double, often found with cleft palate b. Treatment: (1) Cleanliness of mouth (2) Special care while feeding to prevent aspiration (3) Plastic surgery. (Usually before the 8th week of life) (4) Restraints 2. Cleft Palate a. Incomplete closure of upper palate

    - b. Special care in feeding
    - c. Cleanliness of mouth to prevent infection
    - d. Repaired surgically, usually in different stages. Around the first and second year of life.

B. Frenum Linguae, so-called "tongue-tied"

1. Vertical fold of mucous membrane under the tongue which is normally short and tight
2. Interferes with sucking and later - speech
3. Should be observed during the inspection bath
4. The doctor "snips" the margin of the membrane with sterile blunt scissors.

C. Spina Bifida

1. Due to the congenital absence of one or more vertebral arches usually at the lower part of the spine

2. This allows the membrane covering the spinal cord to bulge, forming a soft tumor filled with cerebrospinal fluid
3. Some cases are operable
4. May have paralysis of lower extremities
5. May have incontinence of bladder and bowels
6. Treatment: Routine care plus sterile dressings to spina bifida

D. Congenital Hernia

1. Umbilical: Most common.
    - a. Explain "home remedy" with use of coin
    - b. Treatment -- strapping with adhesive

	2. Inguinal 3. Symptoms: Protrusion noticeable when cries or strains
E. Imperforate Anus	1. Rectum ends in blind pouch 2. Discovered while giving inspection bath or when attempting to take first rectal temperature 3. Surgical treatment is imperative
F. Pyloric Stenosis	1. Partial or complete closure of pyloric valve 2. Symptoms usually occur about the tenth day of life. 3. Symptoms: Persistent vomiting, mostly projectile, about thirty minutes after feedings. Loss of weight, dehydration 4. Treatment: Medically, at first. (thick cereal feedings) 5. Surgery is done after supportive treatment has been given
G. German Measles as a Cause of Malformations. (Rubella)	1. If a mother suffers from German measles during the first twelve weeks of pregnancy there is a chance that the baby will suffer a malformation. a. Mental retardation b. Cataracts c. Heart disease d. Deaf-mutism e. Microcephaly

Step III. APPLICATION:

Oral Questions

A. Define: Harelip. Cleft Palate

B. How is a baby fed that has cleft palate?
C. How is the condition Frenum Linguae corrected?
D. What is a Spina Bifida?
E. What are the symptoms of Pyloric Stenosis?
F. What is the danger if an expectant mother contracts German measles in the first trimester of pregnancy?
G. What is the most common congenital hernia?
H. What is meant by "imperforate anus"?
I. What is a hospital remedy for umbilical hernia?
J. Is Spina Bifida always fatal?

Step IV. Test: (Circle the correct answer)

1. The baby with a cleft lip is trained from birth to sleep on his back or side
   a. to prevent from rubbing his face on the sheets and injuring lip.
   b. to help the nurse "bubble" the baby
   c. to keep the tongue from swelling
   d. to make it easier for the nurse to keep the lip lubricated

2. The baby with a cleft palate or harelip or both often is tube fed post surgery. The upper extremities are restrained to keep the baby from pulling the feeding tube out or bothering the stitches by
   a. pinning the shirt sleeves to the diapers or crib sheet.
   b. keeping the baby "mummied" at all times
   c. keeping the baby "mummied" except when receiving treatments
   d. keeping the arms folded under the baby's back

3. The repair on the harelip is usually done
   a. first week
   b. the second year of life
   c. before the baby learns to talk
   d. before the eighth week of life

4. Pyloric Stenosis is mostly characterized by
   a. vomiting every two hours
   b. edema with a gain in weight
   c. cyanosis
   d. Projectile vomiting about thirty minutes after being fed

5. German measles is thought to be the cause of some malformations
    a. if mother has them during the first trimester of pregnancy
    b. if mother has them during the last trimester of pregnancy
    c. if the husband has the measles while the wife is pregnant
    d. if there are other children in the family with measles

6. A baby with a Spina Bifida has the following symptoms (lower part of spine)
    a. paralysis of arms
    b. paralysis of legs
    c. persistent vomiting
    d. paralysis of lower extremities sometimes

7. When the rectum of a baby ends in a so-called blind pouch this is known as ______________________.

8. Frenum Linguae is corrected by ______________________.

9. The prognosis of Spina Bifida is usually ______________.

10. Two malformations that might be caused by German measles are ____________________ and ____________________.

This lesson plan was prepared by:
Mrs. Mary Harris, Instructor, LaFollette, Tennessee

INSTRUCTORS LESSON PLAN Lesson 29 of 32
Key

NAME OF LESSON: Disorders of the Newborn. Infections

AIM OF LESSON: To understand and recognize the signs and symptoms of infections in the newborn, and to learn how to prevent these infections

REFERENCES: Obstetrics For Nurses, 12th Edition, pp. 479-484
DeLee and Carmon
Obstetrics For Nurses, 10th Edition, pp. 480-485
Fitzpatrick and Eastman

INSTRUCTIONAL AIDS: Opaque projector, illustrations, chalkboard.
Bedside conferences on actual cases. (Clinical)

Step I. INTRODUCTION

A child is sometimes infected before it leaves the womb by bacteria floating in the blood of the mother, but for practical reasons we consider the infant, when born, sterile. The little one is very susceptible to infection. The duty of the nurse is to prevent infection. The principle of this prevention is asepsis of all things coming in contact with the newborn baby.

Step II. PRESENTATION

Points of Information	Key Points
A. Ophthalmia Neonatorum	1. Usually caused by gonococcus a. Eyes contaminated from organisms from birth canal of mother, or from poor technique b. Eyes of nurse may become infected unless she is conscientious in her methods 2. Staphyllococcus may also invade the eyes 3. Treatment: Isolate infant, sterlize all articles used, handle dressings with forceps, nurse should wear gown, gloves and cap

B. Impetigo	1. Contagious infection of the skin 2. Pustular vesicles filled with straw colored fluid. (This spreads the infection). 3. Caused by streptococci and staphylococci 4. Highly infectious in the nursery 5. Can cause death 6. Treatment: a. The best treatment is prevention. Remember handwashing technique. Eliminate any source of skin infection b. Isolation and local treatment of the lesions c. Clean with phisohex -- keep infant dry d. Control scratching e. Parenteral antibiotic therapy f. High nutritional level
C. Thrush: Monilial infection of infant's mouth	1. Caused by fungus from birth canal 2. Caused from soiled breast or rubber nipples 3. Stress importance of cleanliness of the mother's hands, breasts, nipples and bottles 4. Treatment: a. Special care of bottles and nipples b. Application of 1% Gentian violet c. Good nursery technique
D. Epidemic Diarrhea	1. Sudden onset of frequent, copious, watery stools 2. Weight loss-often a pound in 24 hours 3. Death may occur in a day in a severe case. Mostly lingers 4-5 days

4. Spread of disease is very rapid
5. Causes:
    a. Overcrowding in the nursery
    b. Faulty nursery technique
    c. Visitors
6. Treatment:
    a. Absolute isolation-move out of nursery
    b. Fluid therapy
    c. Antibiotics
    d. Strict aseptic technique

E. Syphilis

1. Importance of pre-natal treatment
2. Present at birth or appears from a few days up to four months of age
3. Lesions on the face, buttocks, palms and soles. Patches in the mouth and around the anus
4. Infant becomes restless, develops snuffles and a hoarse voice. Does not gain weight as it should. Lymph nodes, spleen, liver, and ends of long bones are enlarged
5. Treatment:
    a. Penicillin is a specific treatment

F. Staphylococcal Infections

1. Found in skin lesions and in the nasopharynx
2. Factors involved:
    a. Overcrowding the nursery
    b. Hospital personnel as carriers
    c. Poor hospital sanitation
    d. Air-borne organisms
3. Symptoms:
    a. Stuffy noses, pneumonia, conjunctivitis, pyoderma

4. Treatment:
    a. Isolation
    b. Strict aseptic technic
    c. Cap, gown, mask, gloves

Step III. APPLICATION:

Oral Questions

A. What usually causes Ophthalmia Neonatorum?
B. What is thrush?
C. What are some predisposing factors in the incidence of epidemic diarrhea?
D. Name the symptoms of syphilis
E. What is the treatment for staphylococcus infection?

Step IV. TEST (Write answers)

1. What is meant by the Crede treatment of the eyes in the newborn?
2. What is the treatment for impetigo?
3. What are the symptoms of epidemic diarrhea?
4. In what stage of pregnancy is treatment for syphilis most effective?
5. What are the factors involved toward the outbreak and spread of staphlococcus infections in the newborn nursery?

Step V. SUMMARY

1. Review main points of the lesson. (steps of lesson)
2. Show pictures again (pictures are shown with the discussion of each disease).
3. Question and answer session (optional).

This lesson plan was prepared by:
Mary Harris, LaFollette, Tennessee

INSTRUCTORS LESSON PLAN

Lesson 30 of 32
Key

NAME OF LESSON: Disorders of the Newborn. Injuries

AIM OF LESSON: To understand and recognize the signs and symptoms of some of the injuries of the newborn

REFERENCES: Mitchell's Pediatrics and Pediatric Nursing, 2nd Edition, pp. 204-206, Lyon and Kaltenback
Obstetrics for Nurses, 12 Edition, pp. 485-489 DeLee and Carmon
Zabriskie's Obstetrics for Nurses, 10th Edition, pp. 478-480 Fitzpatrick and Eastman

INSTRUCTIONAL AIDS: Illustrations, chalkboard, opaque projector.

Step I. INTRODUCTION:

The nurse must report many signs and symptoms while caring for the newborn. Some are mild and some are serious. Today we will discuss the most common injuries.

Step II. PRESENTATION OF LESSON:

Points of Information	Key Points
A. Facial Paralysis (Bell's Palsy)	(Remember to show pictures 1. Explain: Pressure by forceps on the facial nerve may cause temporary paralysis of the muscles of one side of the face so the mouth is drawn to the other side. a. Particularly noticeable when the infant cries b. Usually disappears in a few days, often in a few hours.
B. Arm Paralysis (Erb's Paralysis)	Show pictures. 1. Explain: Injury to the brachial plexus, inflicted in the course of breech extraction, may cause paralysis of one arm.

2. In the majority of cases, this disappears within a few weeks but may be permanent
3. Early detection and treatment is very important
4. The arm hangs limp, hands or fingers usually retain power of motion
5. Treatment: Keep muscles in position of relaxation without stretching
6. The arm may be placed in a splint or cast

C. Fractures and Dislocations

1. Causes
   a. Result of a version
   b. May occur following a breech delivery in which the arms were extended above the head and brought down into the vagina
   c. Forceful efforts to extract the head in breech presentations

2. Common sites: Clavicle, humerus, femur, jaw bone
3. Symptoms:
   a. Failure of infant to use affected part
   b. Swelling and tenderness over the affected part
   c. Deformity or shortening of affected part
4. Treatment:
   a. Dislocation should be reduced at once
   b. Physiotherapy
   c. Fractures usually heal rapidly in the newborn. Splints or casts may be used

D. Caput Succedaneum
(Edema of the Scalp)

Show Pictures

1. Appears at birth due to birth pressure
2. Usually disappears in a few days
3. Abrasions and bruises often accompany edema of the scalp especially if forceps are used. These also disappear in a few days with no special treatment.

E. Cephalhematoma

Show Pictures

1. Explain: Subcutaneous swelling containing blood. Caused by an effusion of blood between the bone and the periosteum.
2. The swelling appears directly over the bones. Most commonly over the parietal bones.
3. Seldom visable when infant is born and may not be noticed for several hours or more after delivery.
   a. Increases gradually in size until about the 7th day after labor.
   b. Remains stationary for a time and then begins to disappear.
4. Usually absorbed in 2 or 3 months
5. No treatment necessary

F. Intracranial Hemorrhage

1. Synonyms--Cerebral hemorrhage--Brain hemorrhage
2. Occurs after prolonged labor, difficult forcep deliveries, versions and extractions. It is common in precipitate deliveries as the result of the rapid propulsion of the infant's head through the birth canal.

3. Due to excessive or unduly prolonged pressure on the fetal skull
    a. Excessive molding
    b. Overriding of cranial bones
    c. Delicate structures are torn with rupture of blood vessels.
4. Common signs of cerebral hemorrhage.
    a. Convulsions
    b. Cyanosis
    c. Abnormal respiration. (Grunting, irregular, slow).
    d. A sharp, shrill, weak cry
    e. Flaccidity
5. Treatment:
    a. Complete rest -- minimum handling
    b. Should not nurse breast, be weighed or bathed
    c. External heat for shock
    d. Gavage feedings
    e. Sedatives for convulsions
    f. Oxygen for cyanosis
    g. Keep head a few inches above level of hips to lower intracranial pressure

Step III. APPLICATION

Oral Questions

A. What causes Caput Succedaneum?
B. Cephalhematoma appears most commonly over what bones?
C. What are the symptoms for intracranial hemorrhage?
D. What is meant by the term "Erb"s Paralysis"?
E. What bones are the most usually involved in a fracture of the newborn?

Step IV. TEST:

Written

1. What is the nurses responsibility in the treatment of intracranial hemorrhage?

2. What is a sign of facial paralysis?
3. What is a sign of arm paralysis?
4. List three symptoms of a fracture of the femur
5. List five signs of cerebral hemorrhage.

Step V. SUMMARY:

Review the main topics of the lesson

This lesson plan was prepared by:
•Mrs. Mary Harris, Instructor. LaFollette, Tennessee

INSTRUCTORS LESSON PLAN

Lesson 31 of 32
Key

NAME OF LESSON: Asphyxia Neonatorum

AIM OF LESSON: To develop an understanding of the causes and treatment of Asphyxia Neonatorum

REFERENCES: Obstetrics for Nurses -- DeLee and Carmon, 12th Ed. pp. 493-498
Zabriskie's Obstetrics for Nurses -- Fitzpatrick and Eastman, 10th Ed. pp. 473-476

MATERIALS: A glass mucus trap, french and trachael catheters, sizes 8, 10, 12, 14, an infant resuscitator, gauze (4x4), and a Baby Chase.

INSTRUCTIONAL AIDS: An opaque projector
Visual aids from Ross Laboratories, Columbus 16, Ohio

Step I. INTRODUCTION:

The first thing a normal baby does when he is born is cry; breathing is established. If he does not breathe properly he is blue, or cyanotic. If respiration has not begun within 30 seconds or so after birth, the condition usually is referred to as asphyxia neonatorum.

Step II. PRESENTATION:

Points of Information	Key Points
A. Failure of the newborn infant to breathe at birth usually is due to one of three main causes, or to a combination of them	1. Anoxia 2. Cerebral injury 3. Narcosis
B. Anoxia	1. May be caused by a prolapse of the umbilical cord. The cord becomes pinched between the pelvic brim and the fetal head, with the result that the umbilical vein

becomes compressed and unable to carry oxygen to the infant.

2. May be caused by premature separation of the placenta. The infant in utero is entirely dependent on the placenta for its oxygen supply. If the oxygen supply is entirely cut off for more than a very few minutes, fetal death in utero results; if partially cut off, the infant is born in an asphyxiated state and does not breathe
3. Extremely severe uterine contractions may so squeeze the placental site as to jeopardize the infants oxygen supply
4. Show pictures of fetal circulation and briefly review process of osmosis between mother and baby so that the student will remember how the baby in utero receives its oxygen.

C. Cerebral Injury at birth may be caused by:
   1. A difficult operative delivery, such as mid-forcep operations.
   2. A breech delivery.
   3. A version, either cephalic or podalic
   4. Disproportion between the size of the head and that of the pelvis
   5. Long, difficult labor when no instruments are used.

Briefly review types of deliveries. Show pictures of positions and presentations.

D. Narcosis	Narcosis is produced in the fetus by anesthetic drugs given to the mother. The baby has sluggish respiration at birth but usually gets along very well.
E. Prevention of Asphyxia Neonatorum	1. Measurement of the pelvis to make sure it is large enough to allow passage of the infant's head. 2. Good diet and personal hygiene 3. Care in the use of drugs during labor 4. Avoid as much as possible the more difficult types of operative delivery. 5. Listen regularly to the fetal heart tones while the patient is in labor. Report signs of fetal distress. 6. Report passage of meconium-stained amniotic fluid or pure meconium. Review fetal heart tones (normal and abnormal) Review nurses responsibility to the patient in labor (observations) Review importance of good prenatal care.
F. Treatment of Asphyxia Neonatorum	1. Gentleness These infants are often in a state of shock, and rough attempts to resuscitate them, as by vigorous spanking, may do more harm than good. Methods of physical stimulation should be limited to gentle rubbing of the back and light patting of the buttocks. 2. Warmth Heated cribs and warm blankets must be in readiness.

Exposing the completely naked body to room temperature aggravates the state of shock.

3. Posture
   Most obstetricians hold the infant up by the feet right after birth in order to expedite drainage of mucus from the trachea, the larynx and the posterior pharynx. Sometimes the doctor "milks" the trachea by using his fingers and pressing down on the babies neck, beginning at the upper end of the sternum and moving down to the chin. The baby then may be placed on its back in a slight trendelenburg position with the head turned aside to favor gravity drainage of mucus.

Use Baby Chase to demonstrate the posture points and "milking trachea".

4. Removal of Mucus
   Cleansing the air passages of mucus and fluid is essential, but postural drainage alone is often not adequate for this purpose. Suctioning is necessary.
   a. A glass mucous trap is often used together with a catheter. The size of the catheter depends on the size of the baby. A french or a trachael catheter may be used. The nurse may do this resuscitation if the doctor gives the order to do so.

b. Mechanical suction devices are also provided in most delivery rooms and newborn nurseries for the purpose of resuscitation. These are the most convenient.

Have catheters and glass mucus traps on display. Show how to use. Demonstrate the use of the resuscitator.

5. Artificial Respiration
   If the newborn infant fails to cry or the infant's muscle tone fails to improve within two minutes following delivery, the infant must receive oxygen promptly.
   a. Mechanical devices for the controlled administration of oxygen are the most efficient in giving artificial respiration.
   b. Gentle compression of the chest with the hand followed by sudden release may be tried a few times if the person in attendance fully understands this method of manipulation.
   c. Probably the oldest method of resuscitation is mouth-to-mouth insufflation. After placing 3 or 4 layers of gauze on the infant's nose and mouth the operator bends over the infant and puts his opened mouth over the infant's mouth and nose. He exhales gently into the infant's respiratory tract. Follow this with light compressions of the chest. Alternate

insufflation and compression. The operator stands or sits back of the infant's head. Do not "blow into the baby's mouth because "blowing" with any degree of force may rupture pulmonary alveoli. Another danger of mouth-to-mouth resuscitation is that of infection.

Demonstrate mouth-to-mouth resuscitation and compression of chest. Show pictures.

Step III. APPLICATION

A. Have students demonstrate posture points and "milking the trachea".
B. Have students use mechanical respirator
C. Have students practice mouth-to-mouth resuscitation. (use doll)
D. Have students use mucous trap and catheter. (place end of catheter in a dixie cup of water)

Oral Questions -- Direct questions -- Then call on student

1. What are the 3 main causes of asphyxia neonatorum?
2. What is accomplished when the doctor "milks" the trachea?
3. What size catheter would you most likely use to suction a 4 pound premature baby?
4. What are two dangers of mouth-to-mouth insufflation?
5. What are the five principles to keep in mind in treating the infant which does not breathe at birth?

Step IV. TEST

1. The newborn normally begins breathing:

   a. At birth after the cord is cut.
   b. As soon as oxygen is administered.
   c. At birth after the cord is clamped.
   d. Around five minutes after birth.

2. While caring for a patient in the labor room, you observe that pure meconium is being passed through the vagina. This would be a good sign of:

a. Birth of a stillborn
b. A breech delivery
c. A boy baby
d. A cephalic presentation

3. A multigravida admitted with a prolapse of the umbilical cord would indicate to the nurse that the baby is very likely to suffer from:

   a. Anoxia
   b. Anemia
   c. Narcosis
   d. Anorexia

4. An anesthetic given to a woman having a Cesarean section could produce the following condition in the newborn baby:

   a. Narcosis
   b. Neurosis
   c. A nevus
   d. Phimosis

5. Explain mouth-to-mouth insufflation
   List precautions and dangers.

Step V. SUMMARY Review the main points of the lesson.

1. The three main reasons that the newborn does not breathe at birth and the causes of each
2. The prevention of asphyxia neonatorum
3. The treatment of asphyxia neonatorum

This lesson plan was prepared by:
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INSTRUCTORS LESSON PLAN

Lesson 32 of 32
Key

NAME OF LESSON: Miscellaneous Disorders of the Newborn

AIM OF LESSON: To help understand the importance of observing and reporting a condition of the newborn baby.

REFERENCES: Mitchell's Pediatric and Pediatric Nursing, Lyon and Kaltenbach, 2nd Ed. pp. 210-212
Zabriskie's Obstetrics for Nurses, Fitzpatrick and Eastman, 10th Ed. pp. 490-495, and 476-477

INSTRUCTIONAL AIDS: Illustrations, Chalkboard, an Opaque Projector.

Step I. INTRODUCTION:

Did you know that a baby boy could have enlarged breasts? In our lesson today, we shall study and discuss this minor disorder and a few other disorders of the infant during the newborn stage, which is the first three to five days of life.

Step II. PRESENTATION: Key Points

Points of Information

A. Atelectasis

Explain: Prior to birth, the lungs contain no air and are in a state of collapse. With the first breath, expansion of the lung tissue begins and continues progressively for several days until all parts of the lung are expanded. Feeble respiration after birth may expand the lungs only partially, leaving large areas in a collapsed state. This condition is known as ATELECTASIS.

1. Particularly common in premature babies
2. Cyanosis is usually present because the small areas of expanded lung are inadequate to oxygenate the blood properly.

3. Best treated by continuous administration of oxygen, frequent changes of position and occasional attempts to stimulate deeper respiration.

B. Icterus Neonatorum

1. Newborn jaundice, not serious
2. Makes its appearance on the second or third day of life
3. Disappears without treatment about the sixth or seventh day
4. Yellow pigmentation of skin and eyes, caused by rapid destruction of excessive RBC's during first days of life.

C. Milia

1. Pinpoint-sized pearly white spots, mostly on the nose and forehead of the newborn infant.

2. Feel like tiny, firm seeds
3. Due to sebaceous material within sebaceous glands.
4. Often mistaken for "whiteheads".
5. Do not squeeze. They will disappear spontaneously.

D. Phimosis

Remember to show pictures.

1. Explain: The orifice in the foreskin of the penis is so small that the foreskin cannot be pushed back over glans.
2. Undesirable because it prevents proper cleanliness
3. Corrected by circumcision.
4. Corrected by nurse or mother by stretching the foreskin gently while bathing the baby.

E. Hemorrhage from the cord	Types 1. Primary: Due to slipping or loosening of the ligature or clamp. What to do? Re-tie cord or re-clamp. 2. Secondary: Comes from the base of the cord when it separates from the body of the baby. When does this happen? Occurs when separation takes place. About fifth to the eighth day. Consists of persistent oozing rather than actual flow of blood. What to do? Apply sterile dressing. Notify the doctor.
F. Breast Engorgement	Remember to show pictures 1. No cause for special concern 2. May be seen in both sexes 3. Due to endocrine influence. A transfer of hormones from mother to baby. 4. Subsides without treatment. Sometimes lasts two or three weeks.
G. Menstruation	1. No cause for special concern. 2. Occasionally occurs in newborn girls. 3. Due to estrongenic hormone transferred from mother.

Step III. APPLICATION

Oral Questions

A. What is the prognosis of atelectasis?
B. How is atelectasis of the newborn best treated?
C. What is meant by icterus neonatorum?
D. What causes icterus neonatorum?
E. What is milia and what causes it?

F. How may a mother be instructed to correct phimosis?
G. What causes a primary hemorrhage from the cord?
H. What can the nurse do for a primary hemorrhage of the cord.
I. What causes breast engorgement in the newborn?
J. What causes menstruation of the newborn?

Step IV. TEST:

Answer the question or complete the statement.

1. Icterus Neonatorum normally appears about the ____________ to ____________ day of life.
2. Milia is often mistaken for ________________.
3. Phimosis is undesirable because it prevents ________________.
4. The two types of hemorrhage from the cord are ______________ and ____________________.
5. Breast engorgement is due to the transfer of ________________. from mother to baby.
6. ______________________________ and _____________________ are considered as disorders of the newborn but there is no cause for special alarm.
7. When does a secondary hemorrhage from the cord usually happen? What should the nurse do?
8. When the doctor does a circumcision on the new baby, he is correcting:
   a. milia
   b. phimosis
   c. osmosis
   d. hemorrhage from the cord
9. How is atelectasis best treated?

Step V. SUMMARY:

Review the main points of the lesson
In our next lesson we will study about some malformations of the newborn and of how they are corrected.

This lesson plan was prepared by:
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CHILDBIRTH AND CIVILIZATION

by

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In the history of the development of medicine one is surprised to find how closely the same pattern was followed at about the same time among all the peoples of the world. The students of geology and archeology are finding evidences of the common diseases of today, and many times evidence of their treatment is unearthed.

Nor can one fail to note many times the wisdom and truths found in the 9th, 10th, and 11th verses of the First Chapter of Ecclesiastes. The Preacher says:

> " 9: What has been is what will be, and what has been is what will be done and there is nothing new under the sun.
>
> " 10: Is there anything of which it is said, 'See, this is new?' It has been already in the ages before us.
>
> " 11: There is no remembrance of former things, nor will there be any remembrance of later things yet to happen among those who come after."

And in the history of the development of care during childbirth, one can verify the statement with which Dr. Howard W. Haggard begins his book, "Devil's Drugs and Doctors", published in 1929. He says:

> "The position of woman in any civilization is an index to the advancement of that civilization and this position is gauged best by the care given her at the birth of her child. Thus, the advancements and regressions of civilization are nowhere more clearly shown than in the study of childbirth."

That the woman bringeth forth her children in sorrow appears to be a law of this function of reproduction imposed upon the women of all tribes and countries since the beginning of recorded time. Perhaps the primitive woman looked on this as a perfectly normal function and, aside from the discomfort at birth, thought nothing about it. She led an active life with plenty of fresh air and sunshine and, of necessity, did not overeat. Her food was plain - contained all the minerals and vitamins necessary to sustain life - and in addition to all this, her birth canal was gauged to the size of the baby's head.

Cook, with the Lewis and Clark Expedition, noted that when the American Indians married among themselves, their offstrings came with little or no difficulty, but if a white man was the father, trouble was frequent. This is probably true in practically all countries where natives are of small statue.

The Indians thought labor was voluntary on the part of the child, in an effort to get relief from the cramped position. As they had their babies in a squatting position, food was often placed before them to entice the baby to come forth. "The mother was only apprehensive about whether the baby was in a normal position, that is, head first, or whether she would have more than one baby. Abnormal positions meant long labor, therefore, the child was a trouble-maker and was killed if there was too much difficulty. The mother might suffer the same fate. Twins and other multiple births were, as a rule, not allowed to live." (Four Thousand Years of Obstetrics, American Journal of Surgery.)

Ruark, in his book about Africa, entitled, "Something of Value", tells of the wife of the headman on one of the large farms having a baby in the breech presentation. Two women in attendance killed and buried the baby. The British Authorities arrested all the participants, including the headman, jailed them and tried them for murder. He attributes such action as this, along with other interferences with tribal customs, as some of the causes of the Society of Mau Mau. "The primitive woman, alone or with some older woman, sought the bank of a stream or lake, if available, to have her baby. The umbilical cord was never severed until the afterbirth was delivered. To prevent bleeding, it was tolled between the fingers a few minutes and then severed with long, sharp fingernails, a sharp stone or bitten into as the lower animals do. The mother immediately took a cold plunge as a cleansing agent and to stop the bleeding. Massage and squeezing of the womb was employed. Also, the baby was put to the breast after the bath - that helps the womb to contract."

Among most people, childbirth was always regarded as more or less of a private affair, but in the Sandwich Islands, it was public and the procedure was witnessed by all who happened to be about. In 1850, a United States Army Surgeon attended the wife of an Umqua Chief. He reports that when he arrived at the large hut, constructed mostly of driftwood, the place was crowded with men, women and children, all singing, crying and shouting words of encouragement to the patient, who was seated on the lap of an old man with his legs spread apart and he was doing the office of the midwife. The stench was stifling and he was only able to spend a few minutes at a time with his patient.

Since the earliest recorded time, the occurrence of human birth has aroused something of alarm and sympathy among women, so they began rendering such services as they were capable of to each other. Naturally, some observed the procedure more closely than others, came to know some of the principles involved and were better able to care for the mothers and babies. It was from their crude efforts that the art of midwifery had its beginning. (Obstetrics Through the Ages, Medical Journal of Australia, June, 1952.)

There was some advance in civilization when men began staying with their wives to help them through this ordeal. From that developed the practice of "Couvade". These poor fellows had gone through so much and had such a hard time that they went to bed, received the felicitations, cared for the baby, while Mama did the necessary work. Following this, it did not take women long to decide that having a baby was purely a female concern, so the men were excluded from the birth rooms and played only a waiting role, bringing water, caring for the fires and other chores. This marked the real beginning of the art of midwifery, and the first record we have of women being called midwives is in the Bible. We do not know just how much knowledge the Hebrew women possessed but, among other things, they knew the value of position and figured out a way to save themselves some work in holding patients.

In the book of Exodus we find the first reference to the obstetrical chair or stool:

> "The King of Egypt spoke to the Hebrew midwives, of which the name of one was Shiprah and the name of the other was Puah, and said to them, 'When you do the office of midwife to the Hebrew women, and see them upon the stools, if it be a son, thou shalt kill him, but if it be a daughter, she shall live.' But the midwives feared God and did not as the King of Egypt demanded them and saved the men children alive. The King of Egypt called for the midwives and said unto them, 'Why have ye done this thing and saved the men children alive?' The midwives said unto Pharoah, 'Because the Hebrew women are not as the Egyptian women. They are lively and are delivered ere the midwives can come in unto them."

In the 35th Chapter of Genesis, we find the following:

> "And Rachael travailed and she was in hard labour, and it came to pass when she was in hard labour that the midwife said unto her, 'Fear not for thou shalt have his son also', and it came to pass as her soul was departing, (for she died), that she called his name Bononi."

Perhaps she died from hemorrhage.

We also find the first record of version, or turning of the baby, in the 38th Chapter of Genesis. When Tamar was in labor with twins, an arm prolapsed, and the midwife tied a scarlet thread around the wrist or hand to identify the first born, the arm was withdrawn and the other twin came first.

As regards the Egyptian women, normal cases were delivered by midwives, but if there was any difficulty, the priests had to be called in. They had some knowledge of anatomy, but more of drugs. They used hypnotics and analgesics and on occasion physiotheraphy.

It was common knowledge that the mandrake was a hypnotic and an aphrodisiac. When Reuben, Leah's oldest son, found the mandrakes in the harvest field and brought them to his mother, Rachael traded her out of them by letting Jacob spend the night with her.

There is no record of any further advance in the care of women in childbirth until the Greek civilization reached its height, about the fifth century B.C. The first detailed medical knowledge dates from that time. However, I came across some excerpts of two documents that appear to be of sufficient interest to mention. In Babylon, two thousand years B.C., the practice of medicine was regulated in the famous Hammurabi Code of Laws. A set scale of fees was laid down, as well as penalties for malpractice. The law states that a physician should lead an exemplary life, that he should exhibit the utmost integrity, whether dealing with patient or colleague, that his services should be rendered just as graciously to the pauper or person of little means as to the more fortunate. These concepts are not outmoded today. (Physicians Debt to Medicine, Wm. A. Barrett, J.A.M.A., March 14, 1953.)

The other is from Yager Veda, supposedly written by Brahma sometime about the 14th Century B.C. One passage says the medical teacher should be kind and humble to everyone, should be ready to expose the good rather than the bad qualities of others and should always be increasing his knowledge of books. He should be kind and considerate to his pupils and should always be ready and able to explain the most complicated statements in the simplest and most perspicious language. Transactions in the home should not be bruited abroad. Money will be the recompense bestowed by the rich - friendship, prayers, gratitude and an increase of virture will be that of the poor. (Physicians Debt to Medicine, Wm. A. Barrett, J.A.M.A., March 14, 1953.)

In the Greek civilization Aesculapius was the God of Medicine and there are two versions of his birth. One is that he was the son of Appolo, the physician, who took him from his mortal mother, Coronis' womb when she was on her funeral pyre. The other one is that he was the son of Asince, who abandoned him and he was saved by a goat. In either case, he lived to marry twice and had two daughters. He named them Hygeia and Panacea. His instructor was Chiron, The Curtacer, the most versatile of all the celestial professors. Aesculapius died a violent death.

Pluto complained to Zeus that through his ministration to Man, the population of Hades was not increasing. To restore the Zeus slew him a thunderbolt. Man of myth, his symbol, the "Caduceus", is the medical emblem of today. Temples and Sanitoria were erected in his honor, the Prototypes of medical schools and hospitals today. The priests were the teachers and instructors in the temples. They administered drugs, recommended fresh air and sunshine, and abundance of pure water, and operated on occasion. They would not admit a moribund patient or a woman in labor, so the emperor Antoninus Pious erected a hospital at Epidauress for the unfortunates and the lying in woman who wished to take advantage of it. This was quite a step in the progress of civilization.

No medical books had been written at that time so study was limited to lectures, demonstrations and clinics. No examinations were required but completing a temple course the students were required to take an oath embodying the tenets of a physician. The principles mentioned are as applicable to medical ethics of today as they were 2,500 years ago. In part it is this:

> "I swear by Apollo, the physician, Aesculaius, Hygeia, Panacea and all the gods and goddesses so far as power and discernment shall be mine, I will carry out regimen for the benefit of the sick and will keep them from harm and wrong.
>
> "To none will I give a deadly drug, even if solicited, nor will I offer counsel to such an end; likewise, to no woman will I give substance to abortion, but guiltless and hallowed will I keep my life and art.

> "I will cut no man for stone but give way to those who work at that practice. Into whatsoever house I enter, I will go for the benefit of the sick, holding aloof from all voluntary wrong and corruption, including the seduction of all females, of males, of freemen and slaves.
>
> "Whatsoever in my practice I see or hear among the lives of men I will not divulge as reckoning that all such things should be kept secret."

Gradually the priests became more interested in religious matters and left the teaching and treatment of diseases to the instructors whom they had trained. Thus medicine was separated from religion and the first real doctor of medicine came into being.

The greatest of these was that prince of physicians, Hippocrates, whom we regard as the father of medicine and from whom the oath took its name. He lived during one of the most remarkable periods of human thought. It would indeed be difficult today to find a man who could boast of associating with a group of men of such imperishable names as the philosophers Plato, Socrates, Protagorus and Zenphis; the sculptor Polyclitus and the historians Herodotus and Thucydides. Hippocrates developed medicine to a degree not attained again for centuries. His descriptions of some of the complications of pregnancy and childbirth were amazing and, with some addition, could be used in the class room today. All of his teachings were not correct as we know them; for instance, he believed that all babies should be born head first, and that seven months' babies had a better chance of surviving than one born at eight months - still common belief of some today.

Although the Greek midwives were well organized, he succeeded in getting a law passed that they must call a physician in all difficult and abnormal cases. This irked them no end and they referred to Hippocrates not as a physician but as a "He grandmother".

The Greeks had two qualifications that midwives had to meet before they were allowed to practice their art. First, they must have borne at least one child. Pluto mentions a brave, burley woman, Phaenecrata, who, in order to meet this first qualification, bore a child and called him Socrates.

Second, they must be past the child bearing age. Besides attending the mother, their duties consisted of singing sacred songs to welcome the baby, exhibiting the child to its father, who acknowledged paternity by lifting it, and as child desertion was legitimate, to dispose of the body if it was not wanted, in which case the midwife left it on the hillside or the steps of a temple for anyone who cared to pick it up. Otherwise, it died or was destroyed by animals. Abortion was not illegal and was practiced by the midwives, but no physician would perform one.

Child desertion and legitimate abortion were two of the greatest blots on Grecian civilization.

As Greece slipped into obscurity and the schools of arts and sciences were developing in Alexandria, Rome was building an empire. They built a city with paved streets, public baths, good water and a fine system of drainage, but had no system of medicine - instead, systemized superstitions, and looked to their deities for aid. It is said that even the itch was not without its goodness.

It was a fertile field for Greek and Alexandrian physicians and midwives and as they charged for their services, the Romans were sure they must have something of value so it was no trouble to establish a practice.

Among these who came to Rome was Soranius of Ephesus, a graduate of the Alexandrian schools, who practiced there from 98 to 138 A.D. He was our first real obstetrician and gynecologist. His work and teachings brought more care and kindness to the woman in childbirth than she had ever received before.

All laws of all countries prohibited the dissection of the human body, so his knowledge of the anatomy of the birth canal was comparative, but remarkable. He introduced podalic version and extraction by the feet, which many times saved the lives of both mothers and babies. He did not believe in the use of drugs and the mechanical means of trying to strengthen uterine pains, such as suspending the patient by the shoulders, or bouncing her up and down on a blanket and dropping her on a couch. Nor did he believe in the mutilating operations on the child until all other means of delivery had been exhausted.

Following the example of Hippocrates, he wrote on his favorite subject. His teachings and writings marked the peak of ancient obstetrics beyond which no progress was made for over thirteen centuries - rather a regression.

Galen is mentioned, not because of any contribution to care in childbirth, but because of his character and influence on the Church. Another product of Alexandria, he came from his home in Asia Minor and practiced in Rome some years later than Scranus. He believed and taught that all babies should be born head first, and by mutilating with sharp hooks, if necessary. As nothing was known about the anatomy of the pelvis or body and in using these sharp hooks, it was not unusual to mutilate the womb, extract the bladder or a portion of the intestines, resulting in hopeless invalidism at best, but more often in hemorrhage, shock and death. This practice continued for centuties through the middle ages. Is it any wonder that women dreaded the sight of a physician in the birth room?

Galen also believed that the moon controlled menstruation and that the changes of the moon had a great deal to do with the woman going into labor - a fallacy of today. He was an arrogant, efficient, dogmatic, dictatorial rationalist, without the inquiring mind of Hippocrates or the deep thinking of Coranus. He was also a prolific writer and at his death in A.D. 200, left four hundred works, eighty-three of which still exist. The Roman Church adopted him and his views were sacrosanct. (Medical Journal of Australia, Lawrence Townsend, April 1952)

In the ascendency of the Christian religion, the spiritual needs received all the attention at the expense of the physical welfare. The Middle Ages was the darkest period ever for women in this function of reproduction. She had indeed fallen into evil days and paid for her mythical temptation of man with sweat, tears, blood, invalidism and death. Personal hygiene was at its lowest ebb. The walled cities were densely crowded; the streets unimproved, full of mud, filth, flies and vermin. Paris had no paved streets until the Eleventh Century - over one thousand years after ancient Rome. Handerchiefs, tablecloths, nightgowns and table forks did not come into use until several centuries later. The women in labor were in the hands of dirty, ignorant, superstitious midwives, and on account of false modesty, deprived of the services of even the poorest medical attendant, the best of whom had never seen a normal delivery.

In 1522 a Dr. Wert, of Hamburg, disguised himself as a woman and hid behind some curtains to witness the procedure. He was discovered and burned at the stake for his impiety. (American Journal of Surgery, White, New Series, Volume XI, page 3)

The midwives were not only appointed, but controlled by the priests, who were more interested in saving the baby for baptism than anything that might happen to the mother. Some people fight shy of Catholic hospitals on account of having heard this.

The Dominican Monk Alberties Magnus, wrote a book for the guidance of midwives and the Church Councils passed edicts for their practice, one of which follows: In case of sudden death of the mother, her mouth must be held open with a gag so that the child will not suffocate before it can be delivered by section. This operation was performed in ancient Rome.

The lex vigia, as it was codified by Numa Pompielius, ordered that the child should be removed from every woman who died in labor or even late pregnancy. Under the emperors, this became the lex Causare, hence Caesarian section or operation. Julius Caesar's birth had nothing to do with naming the operation. These dead women were called Cesones and it is possible that the name originated from them.

We owe a debt of gratitude to Moschain, who copied the works of Hippocrates, Soranus and Galen during the era of the Byzantine Empire, and thus saved much of the early medical literature. When Constantinople was captured the library was burned, but most of the important Works were saved and stored in the Royal Library of Bagdad and translated into Arabic.

There were many fine physicians among the early Arabians but they made no particular contribution to Obstetrics. They did introduce the fillet - a piece of tape to fasten around the baby's head to aid in its extraction. This was a custom of the Japanese at about the same time and they used whale bone in the application of the fillet and sometimes to aid in turning a baby's head.

In 1255 the Tartars sacked Bagdad and all the remaining Greek manuscripts were burned. The Arabic Copies were preserved and most of them brought back to Europe in the booty of the Crusaders and translated into Latin. Aside from these translations no literature on the subject of midwifery appeared until the 16th Century. (Medical Journal of Australia, April, 1959.)

In 1513 Euchareus Roslyn presented to the Duchess of Benesurick the Rosengarten, of the Garden of Roses, a book for pregnant women and midwives. This in turn was translated into several languages and appeared in England in 1555 as "The Byrthe of Mandinde". Roslyn very likely had never witnessed the birth of a baby and there may have been some irony in his writing, copied mainly from what Moschain had saved from Soranus and Galen. It did contain some principles of hygiene and some practical advice which was helpful. But he stepped out on a limb when he claimed he could predict the sex of the child by the shape of the mother's belly - a prediction still made by some of the older women.

In the Medieveal period, when men were men and women were glad of it, with all the erroneous ideas, ignorance and superstitious it was but natural that all kinds of bizarre things connected with childbirth should be reported and written of.

The obstetrical wonders as collected by one Simon Goulat are worth mentioning to illustrate the point. He reports many cases of superfetation and superfecundation in comparison with which the Dionne Quintuplets are merely a breeze. A Spanish Count, returning from a hunt, was met by a messenger who reported his wife had given birth to twin boys. The Count remarked, "Why, my wife can beat that", and sure enough, before he reached home she had five more sons. In Lombardy, during the reign of the first king, his whore gave birth to seven sons at one time, one of whom became king.

The most fecund woman in the world was the Lady Margaret, a daughter of the illustrious Lord Florentcount of Holland and Mathilde, daughter of Henri, Duke of Borbont, and sister of Wan, King of Germany. Being forty-two years of age, she was delivered on Friday before Easter at nine o'clock of the morning in the year 1279 of three hundred sixty-five babies at one time - one hundred eighty-two males, one hundred eighty-two females and one hermaphrodite. These were all arranged in front of the fount and baptized by the bishop - all the males were christened Jean and the females were christened Elizabeth. There is no record of whether the poor little hermaphrodite was christened or even baptized. (Charles Green Medical Journal and Record, The Wonders of Obstetrical Science, January 4, 1929.)

This harks back to Grecian mythology, the goddess of Artemis, terrified by her mother's suffering at her birth, besought of Zeus the favor of eternal virginity. Later, under influence of the biological urge she seduced Endymion and was punished for her early prudery by a truly god-like fecundation. She gave birth to fifty daughters at one sitting. In more modern times, with reference to unusual fertility, Dr. DeLee mentions in his text book on obstetrics Dr. Mary Austin, a woman physician, who in thirty-three years of wedlock gave birth to forty-four children - six sets of triplets and thirteen sets of twins - no singletons. Her sisters and forty-one and twenty-six children in seven years, and when he seduced a maid servant she also had triplets. Gaulet reports many cases of superfetation - babies born at intervals of one to five months, and to hear a baby cry in the womb three to four weeks before birth was a common occurrance.

During the Renaissance when it has been said the white man really stepped out and demonstrated his superiority over the other races, the physicians and surgeons began to think more deeply and develop the desire to know more about the human body and its ailments.

Vesalius, the so-called father of Anatomy, gave the profession the first accurate description of the birth canal. His work at first was poorly received. Not wishing to antagonize the Church he did not push his knowledge, gained from the dissection of the rest of the body, as did his colleague, Servetus, who was burned at the stake for his pains.

A young Frenchman, Ambrose Pare, possessed one of the highest types of medical minds of the time - a rustic barber apprentice who came to Paris in 1529 to take training in surgery at the Hotel Dieu. After his training and service in the army where he was the first one to use a ligature to control bleeding rather than searing with hot iron or boiling oil, he returned to Paris, to become chief surgeon to the king and a friend of Catherine DeMedici, who saved him from massacre on St. Bartholomew's Night. In the army he was noted for his kindness and gentleness in treating wounded soldiers, so naturally when he turned to obstetrics he instituted the principles of Soranus and women in childbirth began again to assume their rightful position in the advance in civilization. Pare revived podalic version and introduced the induction of premature labor for the control of hemorrhage in late pregnancy and thereby salvaged the lives of many mothers and babies. He worked and established a course for the training of midwives in the Hotel Dieu. Those taking this training were much superior to the ignorant, bedraggled ones who trundled their dirty stools from house to house. (Haggard, Devils Drugs and Doctors, 1929.)

The Hotel Dieu was established by St. Landy, Bishop of Paris, about 612. Of it, Dr. J.S. Billings said, "It was a place for God's hospitality in the interest of charity and as a stimulus to the more fortunate to help his fellow-man. The cause of humanity and religion was advanced more by its effect on the givers than on the receivers." Of the 1,200 beds, 486 were for one patient and the rest were five feet wide and accomodated from three to six patients. The halls were dark and gloomy, the floors for the most part were covered with straw and full of filth and vermin. Nordon said, "In one bed a woman groaned in the pangs of labor, a nursing infant writher in convulsions, a typhus patient burned in the delirium of fever, a consumptive coughed his hollow cough and a victim of skin disease tore with furious nails at his infernal integument." There was always a shortage of medical attendants and sometimes a corpse was not moved from the bed for twenty-four hours. Under the best of circumstances, just imagine trying to get some rest in bed with a corpse. About one fifth of the adult patients died. There were eight beds to accomodate two hundred infants, the majority of whom succumbed to the charity extended them. (Haggard, Devils and Drugs, 1929.)

One of the most famous graduates of the Hotel Dieu was Louise Bourgeois, a sworn licensed midwife of Paris, who officiated at the birth of the Dauphin, Louis XIII, and delivered all the children of Marie DeMedici. Men generally were beginning to pay more attention to his function of reproduction. Louis XIV called in Dr. Boucher to attend his mistress and was so interested that he concealed himself behind some curtains in order to witness the birth. A Dr. Clement was called to deliver the Dauphin in 1682 and received the title of "accoucheur" to replace the appelation of male midwife or "he grandmother".

Following this example it soon became the fashion of the ladies at court to place themselves in the hands of the accoucheur of their choice. Dr. Clement was called three times to attend the wife of Phillip of Spain.

Prior to 1550 Cesarean section had never been done on a living person. In that year one Jacob Nufer, a Swiss swine gelder, after his wife had been in hard labor for four days and thirteen midwives had given up in despair, operated on his wife. She and the baby both survived. It is reported that she gave birth to six other children and died at the ripe old age of seventy-seven. (George Bancroft and Levingston, Obstetrics and Gynecology, Journal of the British Empire.)

The old Hebrew laws indicate that section may have been done by them - in the Talmud the law reads that the woman need not observe the usual days of purification after abdominal delivery. Only sixteen successful sections were reported in the seventeenth century. Hemorrhage must have been quite a problem as sutures were not used to control bleeding until 1882. (Calkin, Cesarean Section, Monograph.) In 1879 Dr. Felkin, an English missionary, witnessed a Cesarean section done by a tribal medicine man in the heart of the Congo. From this savage's technique he concluded that this operation must have been done in his tribe for many years. The medicine man first made his patient very drunk on banana wine, then washed his hands and bathed the woman's belly with the same material. After his incisions and delivery of the baby he squeezed the womb to deliver the afterbirth and to control bleeding he then turned the patient on the side to empty the abdomen of blood, etc. The layers of the belly wall were grasped, run through with fresh thorns and held in place by figure 8 thongs of fresh bark. The wound was dressed with a poultice - her temperature never rose above 101 and she was up and about her tribal duties in eleven days. (Calkin, Cesarean Section, Monograph.)

After ligatures to control bleeding and the suture of wounds came into general use, Cesarean sections became more common and in the last twenty-five years is frequently an elective operation. Due to improved technique and skill of the operators, section has now become one of the safest abdominal operations and carries about the lowest mortality of any of them. The lives of countless mothers and babies are saved by its judicious use.

The next great innovation developed in the care of the parturient woman was the invention of the obstetrical forceps. For centuries physicians had been excluded from the birth room, except in those cases when they were called for multilating operations. They had had no opportunity to study the mechanism of labor and knew less about the anatomy of the birth canal. A French Hugenot, Dr. Peter Chanberlain, in 1580, invented the first crude instrument. He was the son of Dr. William Chamberlain who fled France to escape massacre of St. Bartholomew's Night and changed the spelling of his name to the English pronunciation. (History of Forceps, DeLee Textbook.)

Peter had several sons and grandsons who practiced medicine in English without much regard for the Hippocratic oath or the ethics of medicine, and many times were in trouble with the College or the Faculty of Physic, which like the modern societies, laid down certain principles for the behavior of the profession.

Even so, the family became quite prominent in England. Peter II, his eldest son, was physician to Queen Anne of Charles I, and was one time imprisoned in New Cate by the College for his lack of ethics, but the Queen and the Archbishop of Canterbury secured his release. The family boasted of their ability to deliver the most difficult case of childbirth without prejudice to either mother or child and kept the instrument in the family for over one hundred years trying to sell their secret. In 1670 Hugh returned to France to sell the instrument to Dr. Mauriceau who agreed to buy it for seventy-five hundred dollars ($7500), if he could deliver a dwarf on whom Dr. Mauriceau had planned to do a section. Chamberlain locked himself in the room with the patient and after three hours, failed. Neither mother or baby survived. No sale!

He returned to England and after wrecking a bank, fled to Holland where he sold the instrument to a Dr. Roonbusysen who in turn sold it to anyone able to pay the price. But neither of these crooks ever delivered but one blade. Peter the second was in trouble with the College from time to time but it was never very serious - they just didn't like him. He was not a graduate of Oxford and he insisted that the state should define the amount of instruction the midwives received, that they should be examined by the College and granted a license rather than to be appointed by the bishop. This had never occurred to the College and they were not happy to have a man not a graduate of Oxford to out-think them.

Hugh, Sr., was accousheur to the Queen of James II when the old pretender was born. He was out of pocket and did not arrive at the Queen's chamber until after the birth. The people thought babies had been switched, so the custom of having a court officer present at royal birth's was established. The last of this more or less illustrious family was an ethical, orthodox practictioner who gave the secret to the profession.

In the meantime, John Palfyn, a poor obstetrician, walked from Ghent to Paris to exhibit his forceps to the academy. It was not well received and he died a poor neglected man. In 1784, his resting place in Ghent was marked with a statue of a weeping woman. Many improvements and modifications have been made before the perfection of the instrument of today. In 1887, Tarnier added a traction blade for the handle which has not been improved upon.

Civilization was advancing rapidly and in 1840, Dr. Smellie of England recommended that women have their babies lying down in bed. He and his co-workers in London advocated and established a lying-in hospital for all women who wanted to have their babies in such a position, attended by more skillful personnel. In London the mortality of both mothers and babies dropped considerably.

With the advent of forceps and beds for confinement, the midwives realized for the first time that childbirth was about to pass out of their control, and they didn't take it lying down.

One Mrs. Nehill made all sorts of disparaging remarks about the "he grandmothers". She referred to Dr. Smellie's hands as delicate fists of a great horse, god mother to a man midwife. She accused these so called, self constituted male midwives of being broken down barbers, tailors or even butchers and further said, "I myself know one of the last trade, who after spending his useful life stuffing sausages turned into an intrepid man midwife and physician."

The practice of midwifery declined, but has not passed entirely out of the picture today although they are under better control and in most places take a course before license to practice is granted.

In addition to the ignorance, superstitions, brutalities and filth of the Middle Ages, there were three other conditions affecting the lives of mothers and babies. Described by Hippocrates in his writing, they still exist and have taken a tremendous toll of life. Named in the order of their occurrance and effect on the mortality of mothers and babies, they are: puerperal or child bed fever, the toxemias of pregnancy and hemorrhage, before, during or after birth. It was about the middle of the 19th century before the cause of puerperal fever was suspected and twenty-five years later before it was proven.

In 1843 Dr. Oliver Wendell Holmes wrote and read a paper before the Boston Society for Medical Improvement on the "Contagiousness of Child Bed Fever", and proved to his own satisfaction that it could be caused by the doctor in examination of the patient in labor - that the doctor could convey it from one patient to another, and that careless attendants could transfer from one patient to another. He laid down a set of rules which were good enough to be mentioned in most of the modern text books. This created quite a furor among the profession. The very idea of a physician having unclean hands was not only unbelievable but repulsive. The paper was not widely read and Dr. Holmes lacked the aggressiveness to push his findings. He did follow his own rules in practice and lived to see his pioneer theory vindicated. He died in 1893.

About five years after Dr. Holmes' paper, Semmelweis, at the Vienna Lying-In Hospital, really started the crusade against the disease. First, one of his professors died of a fever, acquired from a cut while dissecting a woman who had died from child bed fever. Second, he noticed that women in the clinic delivered by students fresh from the morgue and dissecting rooms carried a mortality ten times greater than those delivered by midwives who were not allowed about those places. He then announced that the condition was caused from putrid material derived from living organisms and conveyed to the patient on the fingers of the attendant. To prove this, he had the students wash their hands in chloride lime solution and immediately the mortality dropped to a point below that of the midwives.

The professor of the Clinic could not go along with this theory so Semmelweis was dismissed. He moved to Budapest and continued his campaign against the disease until his death in 1865. His death was due to a fever from a cut finger received while operating. He died without knowing what a great contribution he had made to humanity.

Louis Pasteur completed the picture fourteen years after Semmelweis' death when he proved the organisms were bacteria.

Now, since the cause was known, it was but perfectly natural that means to combat it were sought. In 1884, Joseph Lister introduced asepsis and antisepsis in the Rotunda Hospital and the mortality of childbirth dropped to the lowest it had ever been in Great Britain. Sometime later, as a further aid in aseptic technique, Dr. Halsted of John Hopkins Hospital Introduced the rubber gloves. Today puerperal fever rarely occurs in well regulated hospitals or institutions.

Another departure from old methods in the care of the parturient women occurred about the time Semmelweis started his crusade. Dr. James Simpson of Edinburg discovered and used chloroform to alleviate the pain of birth. This not only disturbed the physicians but the laity and also the clergy. The medical profession was afraid of it and well they might be. Though it is a delightful anesthetic, it is not without danger. The laity, particularly the spinsters and women passed the childbearing age knew that the mother would lose her maternal instinct and love for the baby if she did not feel the pangs of labor. The clergy were the loudest in their disapproval because it disobeyed the Biblical injunction and was, therefore, morally wrong. Dr. Simpson was a jolly good fellow who loved to argue and write, so he answered all criticisms but kept on using the drug. He silenced the clergy by quoting the 31st verse of the second chapter of Genesis: "The Lord caused Adam to fall into a deep sleep and removed a rib from which He made woman."

The last three children of Queen Victoria were born under chloroform anesthesia. This example was followed by more and more women who wanted the Queen's anesthesia, so it gradually came into general use.

The Queen knighted Dr. Simpson for his discovery and use of this great boon to womankind. Sir Walter Scott, who was present at the ceremony, suggested to Sir James that he have on his coat of arms "a wee naked bairn" and underneath it this inscription, "Does your Mama know you're out?"

Ether was discovered about the same time, or earlier, and first used in obstetrics by Dr. Crawford W. Long, of Athens, Georgia, who delivered his wife under it in 1845.

Practically every known inhalation anesthesia has been used in effect to find a perfect one. Many other drugs that can be given by mouth, rectally, hypodermically, or into the blood stream are now employed. The majority of patients now go through their labor in comparative comfort, or at least a poor recollection of great pain.

Some years ago Dr. Grantley Dick Read, of London, wrote a book on natural childbirth, which has a form of physiotherapy as its principles. A great deal of time is spent with the patient during pregnancy teaching them to relax and trying to convince them that they should have little or no pain. It is very difficult to talk one out of real pain, so perhaps the majority wind up taking something after all.

The Egyptians used physiotherapy 3,000 years B.C. Over a thousand years ago Miamonides recommended hypnosis, but for obvious reasons that has not caught on. (DeLee, History of Forceps, Textbook.)

In the latter part of the nineteenth century physicians began to devote more time to obstetrics and specialize in that field and a chair was assigned to its teaching in medical schools.

Pre-natal care was a logical development and one of the most notable advances in the history of this function of reproduction. It was first instituted in the hospitals in New York in 1907 and then only in the last two months of pregnancy. Today, it begins in the early months or weeks of gestation. The patient is spared much of the discomfort and anxiety of early pregnancy and by frequent visits to her doctor many abnormal things particularly the toxemias, are prevented - advice is given and the patient carried to term in the very best possible condition to meet the ordeal of birth. The lives of countless mothers and babies have been saved and much invalidism prevented.

The writer takes pride in having been one of the first, if not the first, to open a prenatal clinic in the South and to use it in private practice. In 1915, in cooperation with the City Health Department, Vanderbilt University Medical School and the Methodist Church, this clinic was organized and opened at Warioto Settlement Home, later Centenary Methodist Institute, and operated there until 1930 when it was moved to the present Vanderbilt Hospital. We saw from two to three hundred patients a year, giving much the same care and advice as we do today - as in all things, medically it has improved with the times. At present all the hospitals in Nashville maintain prenatal clinics for the indigents and training of interns and nurses. When we began operating this clinic, thirty-three (33%) percent of the babies born in Nashville were delivered by midwives. In ten years, there was not a midwife in practice here.

This prenatal care was nothing new under the sun. It is recorded in the 13th chapter of Judges that the angle of the Lord appeared to Manoah's wife, who was barren He informed her that she would conceive and have a son and that she was not to eat anything that comes from the vine, neither drink wine or strong drink or eat of any unclean thing - good advice for the time, and she brought forth Samson, the world's original strong man and a judge of Israel.

As regards hemorrhage, the third complication described by Hippocrates, we cannot prevent it entirely, but are much better prepared to take care of it. What with blood banks and transfusions, rarely is it listed as a cause of death.

Following so much emphasis on prenatal care, it follows that some attention should be given patients after birth. So advice and instruction is given to patients to follow during the puerperium, the time required for the birth canal to return to normal after birth. This is about six weeks, and some of us follow the patient at intervals of three to four months for a year. But this is no new thing. In Leviticus, Moses sets aside a time of purification which corresponds to the puerperium.

Twenty years ago, with less than a million births a year, it was estimated from statistics available that over 30,000 women lost their lives in the United States annually from the disorders of pregnancy and childbirth - accidents and sickness were not included in this report. In 1955, with three and three-quarter million live births reported, there were two thousand deaths.

The medical profession generally and the obstetricians in particular are justly proud of this achievement, but all of us will continue to strive to improve this. Some one has said the Golden Age of medicine arrived with

Hippocrates - perhaps we have yet to attain the Golden Age of obstetrics. When that time arrives, the pregnant woman can go to the hospital at a time most convenient for all concerned - have her baby in comparative comfort, and return home in a short time and at the end of the puerperium be as well as ever.

Finally, one must not fail to mention the pediatricians who are doing such a wonderful job in caring for the new born, whether premature, immature, or full term. Their ministrations, coupled with those of the internists, have increased life expectancy twenty-five years since the turn of the century. And now, since so much attention is being given geriatrics, and talk of increasing social security along with decreasing the retirement age, we can expect by 1960 a population of 200,000,000, with the first hundred million looking after the second hundred million, and vice versa.

Perhaps, too, by that time we will have reached back into the ages to follow again the example of Moses, who retired the priests from active duty at the age of fifty.